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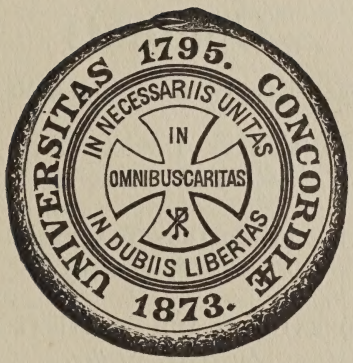

Volume IV Number 1

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Union University Quarterly

Vol. IV **May, 1907** **No. 1**

THE ONE HUNDRED-ELEVENTH COMMENCEMENT.

The One Hundred-Eleventh Commencement of Union College will be celebrated during the second week in June, from Sunday, June 9, to Wednesday, June 12. The exercises, except as otherwise specified, will be held in the First Reformed Church.

On Sunday evening, June 9, at half-past seven, President Raymond will preach the Baccalaureate Sermon.

On Monday, June 10, the Grove Exercises of the graduating class will be held under the Old Elm Tree in Jackson's Garden at three o'clock in the afternoon; at half-past seven in the evening the Extemporaneous Prize Debate and the Junior and Sophomore Prize Speaking Contest will be held.

Tuesday, June 11, will be Alumni Day. The executive Committee of the Alumni Association has been making great and, it is hoped, successful efforts to secure a large attendance of alumni. The Classes of 1847, 1857, 1867, 1877, 1882, 1887, 1892, 1897, 1902 and 1904 will hold reunions, and representatives of these classes have already been chosen to speak at the Alumni Dinner. Goverernor Hughes and Lieutenant Governor Chanler will be present as guests of the College on Alumni Day, and Lieutenant Governor Chanler will present the greetings of the State at the Dinner. The Phi Beta Kappa and Sigma Xi Societies will hold their annual meetings at nine o'clock on Tuesday morning. At ten o'clock the Board of Governors will meet, and at half-past ten the Board of Trustees. The General Alumni Association will convene in the Chapel at half-past ten and at noon will ballot for one trustee to succeed Professor Franklin H. Giddings, '77; the Executive Committee of the Alumni Association requests alumni who are not to be present at the an-

nual meeting to signify whom they prefer as Professor Giddings' successor. The ladies of Schenectady will provide and serve dinner at the Schenectady Armory at a quarter past one in the afternoon; for the ladies' sake come, and for your own sake you will rejoice alway. The Class Exercises of the Class of 1907 will be held at four o'clock in the afternoon. At eight o'clock in the evening the College Musical Clubs will give a concert in the Van Curler Opera House; our long predicted harvest of melody will ripen and be reaped on that occasion. Class banquets and the fraternity reunions will be held on Tuesday evening and so on following with no precise temporal abridgment; home-bound votaries, when rosy-fingered Dawn, the daughter of the Morn, arises from the streams of Ocean, will greet Commencement Day.

At ten o'clock on Wednesday morning, June 12, the Annual Commencement Exercises will be celebrated. The Honorary Chancellor for the year is the Hon. Joseph Eugene Ransdell, of the Class of 1882, Member of Congress from the Fifth Louisiana District. The President's Reception to alumni and friends of the College will be held at the President's residence at eight o'clock on Wednesday evening. At ten o'clock, at a place not yet determined, the Senior Class will begin to receive and will continue to do so until rosy-fingered Dawn, the daughter of the Morn, arises to greet and enlighten Thursday morning; after which our annual gathering will adjourn.

Alumni, Alma Mater is cleaning house for you. She is sweeping the grass and dusting the trees and, in general, is making things very neat and tidy. She herself looks like perpetual youth,—and all for you. Come and see the dear old lady. You will like her and find her still as charming as ever.

THE CLASSICS AND MODERN EDUCATION.*

SIDNEY G. ASHMORE.

In England a request coming from the king to one of his subjects amounts to a "command." In this country, where the Press is sovereign, a request coming from a representative thereof amounts to something even more than a command, and disobedience is fraught with dire possibilities. Such a request do I find myself face to face with at this moment. To tell the public why they ought to study Latin is what I am required to do. Moreover I am expected to discuss the subject within the limits of a column or two of a daily paper—a subject whose pros and cons would easily fill a volume. I must therefore beg the indulgence of the reader if I confine myself to the expression of a few opinions. To give reasons is always dangerous, even when they are given in full, but to state them in a partial or fragmentary manner is to invite criticism. On the other hand, mere opinions may be taken for what they are worth, and when expressed in good faith are occasionally not without value.

On the subject of the proper relation of classical studies to the present system of school education in the United States, there is a great diversity of opinion. This diversity of opinion is found not only among professional teachers, but also among the parents and guardians of the children, and there can be little doubt that the public mind is largely in an attitude of opposition, at least to the inclusion of Greek among the subjects of study in the schools, while Latin comes in for a decided though smaller share of discredit. The extension, too, of the elective system, as it is called, from the universities to the high schools has thrown much weight of infant opposition into the scale, and the "I don't want to" of the school boy is listened to with respectful attention. Indeed, so great is the influence exerted in this way that the statistics, showing the number of the pupils in the schools who have elected to study Latin, are really misleading, inasmuch as a large proportion of the children are permitted to abandon the study

*Reprinted from the *Schenectady Gazette.*

soon after they have begun it, a few only having the steadfastness of purpose to carry it through to the end of the four years' course.

This situation is relatively a new one. I can point to the time within my own recollection when, in this country as well as in England and Germany, public sentiment upheld any system of education which made Latin and Greek the centre or staple of the course of study. This was true of the schools and the colleges alike. Accordingly those who still believe in the verities and virtues of the old system are fain to make common cause against the image-breakers, and to seek to combat what they regard as a sign of mere perversity, calculated to overthrow some of our best national traditions. The question touches the schools more nearly than the colleges—a fact that adds greatly to its importance. That which affects the schools comes close to the life of the nation. Were Latin and Greek to become again the chief subjects of study in the higher grades of our schools, it would signify little what the universities did about it. As matters are to-day, almost the only safeguards afforded the classics regarded as a means of education, are provided by the higher institutions of learning (notwithstanding the fact that many of these are less well equipped than they might be for their classical work), for it is mainly through their influence that antiquity holds its own at all in the esteem of our school authorities.

I have occasion to know something about a school not very far from Schenectady, where Latin and Greek have been taught ever since the school first opened its doors to the public, many years ago. To-day the principal is casting about to see if by some means he may abolish Greek from the curriculum. If he succeeds he will presently throw a shadow over Latin also, for everywhere must the fall of the one be eventually followed by the demise of the other. But such a man represents a tendency or drift in public opinion. He is thought of as "practical" and "progressive." To my mind he is neither. He is actually retrogressive, for he is taking a step backward. That the outlook of the colleges and universities in regard to this question is a broader one than that of the schools is certain. It is impossible to-day to point to a reputable university in the United States, where some provision is not made for instruction in both of the

old classic tongues. In the colleges of the Middle West and South, and in California, the classics are held in especial reverence—a fact well attested by the inter-collegiate associations lately formed, in those parts of the country, for their dissemination and encouragement.

But what can the colleges do to bring both the parents and the school boards to a better understanding of this subject? Without pretending to superior wisdom on a point wherein the persons referred to should perhaps be allowed to judge for themselves, the colleges can at least point out, more fully than it has been their wont to do, the very distinct advantages to be derived from holding fast to a subject of study that lies at the base of all our culture, whether in Europe or in America. Two considerations seem to me to be of paramount importance in connection with the study of Latin in the schools, and in referring to these two considerations hereafter, I should like to be understood as saying the same thing about Greek. In the first place, if regarded only as a means of mental training, Latin is superior to every other subject in the school curriculum except Greek. In the second place, if rightly studied in the school, the Latin language becomes more helpful than anything else to those who are ambitious to make genuine progress in the acquisition and correct use of our English tongue. In some respects the second of these considerations is dependent on the first. Let us consider each in turn.

The claim has lately been made, by a certain school of thinkers and investigators, that the study of language is more efficacious in developing the mental powers of the child than the study of either mathematics or the physical sciences. It is contended also that of all the languages of Europe, commonly taught in American schools, Latin and Greek possess the highest virtue in this direction. This claim is not a recrudescence of the old controversy between language and science, nor of the ancient languages versus the modern. It is based on the results of certain recent studies in psychology and pedagogy, which are of too technical a nature to be of interest here. It must suffice at this moment to state the fact that the theory has now a very respectable following, and that not a few prominent educators are of the opinion that the study of language (apart from scientific

grammar) is more conducive to the healthful expansion of the intellect, prior to the age of twelve, than the study of any other of the subjects known to our school system. This does not mean that simple arithmetic should not have a place in the curriculum; nor does it signify that the first beginnings of physics and chemistry should be wholly excluded from the school courses. It means only that language should take precedence of other subjects, both for the sake of the results which its study directly produces, and because neither mathematics nor the physical sciences can be pursued so far or so freely as language can, before they reach the sphere of the complex and the abstract.

Language (not regarded as a science) seldom gets very far away from the concrete, so long as the pursuit of it stops short of the domain of formal grammar. It is a virtue of language that it tends to maintain its association with the things it is intended to represent—to cling to the image which its words call up to the imagination. It is a peculiarity of mathematics that its symbols incline naturally to fall away from the concrete objects with which they may have been connected in the mind of the thinker, and to call for treatment as pure abstractions. It is this tendency of the signs of number that renders all higher mathematics a thing out of place in the school room, and a thing quite within its proper limits in the college. It is true that words also are capable of being separated in consciousness from the things they stand for, and of being dealt with abstractly like the signs of number. But, even so, words never wholly lose connection with the mental image with which they have once been identified, and this fact renders them of primary value in early education. The concrete should precede the abstract in education, as all persons will admit, and the abstract science of word-relations, or grammar, need intrude itself but little into the ordinary and objective language study of the schools. Grammar is a science in itself—as much so as chemistry or physics or economics. Its study, in the higher and real sense of the word, belongs to the mind that is mature and capable of subjective thinking; it should never be undertaken by the child under fourteen years of age. Can language be learned without grammar? Permit it to be said that until a certain stage of learning has been reached the child's progress is hindered more than it is helped by any method

of language teaching, that tends to deal with words and sentences apart from the ideas they are intended to convey. Now analysis (which in this case is grammar) is just such a method, and for that reason it should be very warily employed, if not rigidly excluded, in all elementary instruction.

If now we should admit that language ought to take precedence of mathematics and the physical sciences in the school curriculum, the question arises whether, of the several languages at our disposal, we should choose one rather than another as essential to our theory. After the mother tongue, which invariably should be first and foremost, that foreign speech ought to be preferred to others which contains in its vocabulary the largest proportion of concrete words, that is, words representing the visible and tangible objects in the world about us. More than this, that language which has, relatively speaking, what I shall term the concrete habit,—the habit of using a concrete word or phrase or form of expression, when an abstract one would answer the same purpose,—such a language is, of all, the one most fully entitled to preëminence as a school discipline. A comparison of the various tongues of Europe, with particular reference to this quality or characteristic, would leave little doubt that the language best suited to the needs of early training is Latin.

Again, there is more education or mental development to be derived by the child from the study of two languages at one time than from the study of one language only. This is true, because education comes partly through observation and comparison, which are the more easily carried on when the material is the more extensive and varied. Theoretically speaking, the greater the number and variety of the languages presented to the child for comparison, the greater will be the mental stimulus and consequent mental development—provided always the child be carefully guarded against confusion and mental strain. But assuming that one of the languages under consideration is English, the second should undoubtedly be Latin, and if two or more be added to the mother tongue, Greek should on no account be omitted; for Greek like Latin is farther removed in structure and syntax from our English speech than any of the modern tongues can be said to be, and so far as its intrinsic value as a

mere discipline is concerned there exists little choice between it and Latin. If it be regarded from an æsthetic standpoint simply, that is, from the point of view of general culture, Greek has no peer among the languages of Europe.

I have now to conclude with a few remarks on the second broad division of this subject, namely, that which deals with the value of the classics as an aid to the acquisition and correct use of the English speech. It would be absurd to affirm that a knowledge of Latin, or of Latin and Greek together, is always accompanied by a knowledge of English; and yet I can recall the time when such an hypothesis was widely credited, and acted on. English, like everything else, must be studied in order to be understood. People must read it, write it, speak it, and think in it and about it; and all this must be done under certain favorable conditions, or the result will be unsatisfactory. Nevertheless it is a fact that the more broadly a man is conversant with the general subject of language and with the forms which language assumes in the best literature, the better equipped will he be to do justice to his own vernacular, whatever that may be; and it rarely happens that a master in the art of English expression is wholly without acquaintance with foreign tongues. Indeed it may truly be said that the student of English can, least of all people, afford to remain wholly ignorant of those four or five or even six kindred languages which, in addition to English, now constitute the staple of linguistic education in England and America. Among these languages are Latin and Greek. The others are French, German, Italian and Spanish. All of them are derived, more or less, from a common stock. But no one of them, so much as English, is constructed from a general mingling of the elements found in all the rest.

Now, although the Anglo-Saxon element in English is large, yet what may broadly be designated as the Latin element is large also—so much so, in fact, that Latin is even more important as a constituent factor in the language of the British Isles than in that of France; while Greek has far more to do with our native tongue than is dreamed of in the philosophy of nine-tenths of our educated men and women. Were it for no other reason than that we may know something of one of the most direct and abundant sources of our everyday speech, it would be worth our

while to lay the foundation in childhood of an acquaintance with the Latin tongue. If to this we add the power to appreciate the literature, the history, the life, of one of the most highly developed and comprehensive civilizations the world has ever seen, not to mention the nearness of that civilization to our own—a power that certainly cannot be had in full except through reading the Latin language itself in which the records of that civilization are preserved—we may conclude that before we drop Latin from our curriculum of studies we shall do well to count the cost.

And yet, after all, this matter of the partial derivation of our English speech from the Latin, or from the Greek, is not the point on which it is proper to lay the greatest stress at this moment. The value of Latin studies to the study of English lies (in childhood) more on the side of mental training than on that of general culture, except that training and culture are in reality more closely knit together than it is the common fashion to represent them. On account of its concrete character, already referred to, the Latin vocabulary is especially well adapted to the mental requirements of the inexperienced learner. On account of its supremely logical word-order (a matter that cannot be discussed in this article) it is more effective in leading the young mind into paths of accurate and exact thinking, than anything else at present in use for that purpose. But of all the languages just mentioned English makes the largest demands upon its votaries for a preliminary training in the art of lucid and logical expression. English possesses two general qualities wherein it differs not a little from other modern tongues. Its enormous vocabulary, the variety and number of its synonyms, and its natural flexibility in the matter of word arrangement give it a wealth of descriptive phraseology, a power of elegant and refined expression, and a capacity for clear and lucid statement, quite unparalleled in modern times. On the other hand, the very abundance of its materials is a source of embarrassment to the unskillful. If we compare the English idiom with that of the German or French tongue, we shall find that the Continental languages have crystalized into a greater number of conventional phrases, of set forms of expression, than has our own speech. These established phrases largely determine for the speaker the order of his words and safeguard him against am-

biguity and vagueness. If a Frenchman has anything to say he finds an idiom ready at hand in which to say it—an idiom well known and understood. The question of word-order is less often a matter for thought with him than with the Englishman or the American. Hence the English-speaking person, other things being equal, is under greater obligation than either the Frenchman or even the German, to be careful and precise, not only in the choice of words but also and particularly in the matter of adjusting their order, lest he may leave his meaning open to doubt, or obscure it altogether. It would be interesting to illustrate this view of the subject by means of examples; but time and space are lacking just now, and I must be content with this pronouncement of a mere opinion. Yet all that has been said points to one thing more than to any other, namely, to the paramount value of linguistic training in early childhood, of which training the ancient classics should be the foundation stone, or if Greek be perforce excluded, then the language and literature of ancient Rome.

THE COMPENSATION OF COLLEGE TEACHERS.*

EDWARD E. HALE, JR.

Mr. President, Ladies and Gentlemen: I noted several things in the newspapers this morning that are of some interest; and I want to call your attention to one or two of them before I proceed to my own remarks. The first of the notes (which I read coming down in the train) has this heading: that "French Lawmakers Vote Raise," which means that the Chamber of Deputies the other day voted to increase their own salaries. On which the New York *Sun* remarks as follows: "They boost their pay in a hurry; need the money, but won't get it;" and explains that their votes do not of necessity provide the means. We may have some such views as that in mind in the consideration of this subject. We shall have little difficulty in determining the necessities of the case; but in determining the means—the actual means whereby they may be carried out—we shall have more difficulty. For myself, when I told your Executive Committee that I would write a paper on this subject I had no idea what I was doing. Contrary to their usual practice, the members of that committee did not invite in this case an expert. I am not remarkable among college teachers for my knowledge of our topic, and I have no special attainments in this field. I am not a statistician, for instance, or an economist, to be practiced in considering such matters; nor have I any connection with college administration, as though I were a Trustee, or a President, or a Treasurer. I know only on this subject what any one of you may know, what every one of you, I have no doubt, does know. I know, perhaps, a little more now than I did when I began my considerations; but that, I think, is all that I need to say in recommending myself to your attention.

It is unnecessary, I believe, then, for me to say that I have

* This paper was read at a meeting of the Association of Colleges and Preparatory Schools of the Middle States and Maryland, held at Philadelphia, Nov. 30th, 1906. It was one of three papers on the subject and for this reason one aspect of the question is very slightly treated, namely the fact that the salaries of most college professors at the present day are so small that the men who have them find it hard to get along, while young men of ability often do not care to take the chances of the profession. That matter was discussed by other speakers. It seems a sufficiently well established fact to be assumed, and yet it may be well to account for the absence of any discussion of it.—E. E. H., Jr.

made no exhaustive inquiry into the facts of the case. A real investigation of all the facts would be far beyond my power; and a partial investigation would merely be one of a number which must be superseded when this subject is dealt with by a competent authority. A real investigation of the subject, of the facts in the case, by some general body, would be an excellent thing; meanwhile you will allow me, I believe, to take one fact for granted, namely, this (which has been mentioned before, practically,): that the compensation of college professors is less than is needed for their full efficiency. Perhaps this view needs proof, but I think not. I shall certainly not try to give it.

Among other notes that I mentioned in the morning paper was one in the New York *Sun,* which takes quite a contrary view, of which a writer remarks as follows: "It is a fallacy to say the teachers" (and college teachers are spoken of)—"it is a fallacy to say that college teachers are underpaid. A good teacher is generously paid in kind. The man who handles money, and goods that are valued in money, makes money; the preacher who labors in the spiritual realm gains in the spirit; and the teacher who tills the intellectual field reaps his harvest in that field." I believe that to be the case; but I do not think that it can be used as an argument against the proposition which I start with. Mr. Carnegie, in establishing the Pension Fund, says: "I have reached the conclusion that the least rewarded of all the professions is that of the teacher in our higher educational institutions"—the least rewarded. That was the opinion of a business man who proposed to invest $5,000,000 upon it. If it were contrary to the opinion of others who have looked into the matter we might possibly think it doubtful; but as it merely states what has long been held by almost every one who knows anything about it, we may well enough pass it till it is successfully disputed.

In Mr. Carnegie's statement is one point that does not belong to our subject; he believes that the teacher's profession is the least rewarded. We need not go into a comparison with other professions. It is enough for me to hold that it is not well rewarded. This matter was somewhat discussed a dozen or more years ago. It was wisely felt, say ten or fifteen years ago, that a number of circumstances had conspired to put the

college professor, with a salary much the same as he had had for twenty-five years then, at a considerable disadvantage. It was believed at that time by many that in the reorganization and accommodation of college life in the last quarter of the nineteenth century, for instance, the professor's salary was an element that had not been considered sufficiently; but since that time—say ten years ago—the cost of living has greatly advanced. Prices have gone up, as everybody is aware; just how much they have gone up, is unimportant. Many great industrial bodies (as, of course, we must have noted in the last month)—many great industrial bodies have made a ten per cent. raise lately in the wages of their workmen. It is not likely that the rise in prices, which has caused this raise, is less than ten per cent.; I have heard it put as high as thirty-three per cent. The point of importance is that it is considerable; and on this let me read you another note that I clipped from the paper this morning. It comes from an address delivered not long ago by the late President Spencer, of the Southern Railway.

He writes, in speaking of railroad administration, having no idea of college matters, and no consideration of them at all. . I could merely read his remarks to show that we are really dealing with facts and not with some academic dream. He writes: "In regard to the management of railways, with the increase in the price of everything the carrier must buy, and with decreasing rates a point must ultimately be reached where the carrier's capacity to meet the public demand for increased facilities must be substantially impaired."

Now we do not look on decreasing rates, namely, decreasing salaries, to be sure; but we do look, as he did, upon an increase in the price of everything; and we must, therefore—even if salaries remained precisely the same—we must, therefore, look to a point where our capacity to meet the public demand must be substantially impaired.

We are, then, in a position in which it is generally agreed, I believe, that the salary of the college teacher is very low. Whether it is lower than conduces to his best efficiency may still be a question with some; but when we consider that some of the difficulties of very low salaries are, for instance, anxiety for the material support, a prospect of hasty and slighted work, a

tendency to intrigue, and possible injustice, a certain commercializing standard (and these I note from one or two articles written on the subject by others—every college teacher, I think, here, knows that these are serious possibilities)—do they not hinder the efficiency? I do not name them myself; I take them from a discussion of the subject which offers also the chief danger in a state of things better than what we know now, a state of things in which a professor is well paid. There is the danger that a professor may go to sleep comfortably in such a Utopia as a college would be with decent pay. That is the only difficulty on the other side; and that that is a perfectly real danger and a great one the whole history of university life shows. There is scarcely one of us that has not seen an example of it. It is a possible danger that a professor, if comfortably situated, may get lazy and not do his work, but it is a danger which will not, in my judgment, become generally pressing for quite a little while.

Supposing, then, that I may take all such matters for granted, let me go on to what seems really the interesting topic, namely: What are you going to do about it? I know there are many other interesting standpoints. We might take a philosophic view, or discuss the real basis of compensation or the real value of services rendered; but, as I have pointed out, those are not directions in which I have any ability; I can merely ask you to look with me at the practical standpoint, from the practical standpoint, and to ask what can the professor do about it? I might take a somewhat wider view, but I shall not at all take the view of the Trustee, who is able to vote to increase salaries.

Considering, then, the matter alone from an individual point of view, I believe that we may represent the facts of the situation at once effectively and elegantly by an equation as follows: If you like to write it down, it may perhaps render the rest of the paper clearer to you to do so.

$$\frac{C}{N} = E$$

We thus have a graphic presentation of the circumstances I have in mind. C, you will readily guess, means Compensation; E, it is not hard to say, must be Efficiency. What will N be? Why, N is the Need of the college professor.

Now $\frac{C}{N}$ we may state will equal E. You will at once perceive a difficulty of our presentation. If C should increase in a remarkable and disproportionate manner, beyond all comparison with N; then shall I imagine that E is also to increase? Would not the professor, then, enter that sleepy Utopia, alluded to a short time ago? Possibly he might. It would be bad if he did. I would gladly have the experiment tried. I offer myself as a subject; but I am afraid we need fear no such remarkable or disproportionate increase.

But we have another danger. A great thinker of the last century in a celebrated monograph on things in general, considered some branches of our topic. Thomas Carlyle, in Sartor Resartus, presents to us Professor Teufelsdröckh considering what he called the fraction of life; and what does he say about it? "The fraction of life can be increased in value not so much by increasing your numerator as by decreasing your denominator. Then," he cries, "make thy claim of wages as zero; for unless my algebra deceive me, unity itself divided by zero will give infinity."

Here, also, we may readily be led to error by the too limited consideration of our problem. In following it out, we might readily get to such a point that, as a learned writer remarks on this subject: "Compulsory plain living may produce a race of professors incapable of high thinking."

Avoiding, then, such extravagances, let us think of the general; let us consider our ratio of efficiency. Let us, in other words, see what may sensibly be done, either by increasing the numerator or decreasing the denominator; either in increasing the professor's salary or decreasing his needs.

What means are offered? I suggest a number that seem to me practical. Most of them, I add, seem to me ridiculous. Some of them are so. But all have been thought of seriously or put in practice.

First, one means of increasing the numerator is for alumni or other persons to give the Trustees of any institution certain sums for the special purpose of increasing the salary list. This was done some years ago by a prominent and distinguished graduate of one of the smaller New England colleges, and is

being done now, I believe, by more general subscription among the graduates of Harvard. I have no doubt there are other institutions with which I am not familiar, with other circumstances with which I am not familiar. What shall we say of such efforts? Certainly we shall say, first, that they are inspired by the finest of feeling. I should welcome an increase of salary, of course, like anybody else; but I should like, I think, perhaps best of all, an increase coming from an old graduate or graduates. To have a fellow say to one, on graduating: "Professor, I got a lot of good out of you," is one of the rewards of the college professor. More would it be, I can fancy, for a graduate of some years' standing to say: "I remember you and your work so vividly that I want to make more return now than I could at that time." Still, in spite of all this, I cannot say that I think this is the best solution of the subject, even though it be an attractive one, and even though it were generally followed. It looks a little too much like making a benefice out of what should be a right. To tide over a serious time it is doubtless well, but cannot, I think, be a permanent solution.

Now, what next? Next I offer a suggestion which cannot be put in dignified words. It is that one should bully or cajole president and trustees until his salary is raised. Now, under this head, come first all the agitation and intrigues which are too great a possibility in a university, as elsewhere doubtless where salaries are very small. I shall not say anything about it. Some of you may not think it is a danger; but my experience of university and college life leads me to believe that it is a danger—a danger that easily arises from the conception that the salary list is to some degree within the control of the trustees. It may here be noted that this particular view is correct; the salary list is a part of the budget and may be raised or lowered as the finance committee may see fit. As a rule, the understanding is diffused that professors' salaries are just as high as they possibly can be. Professors really do not know much with exactness of the financial affairs of the colleges to which they belong; but it is most probable that the trustees of most colleges consider the professor's salary as definitely fixed until something like a cataclysm shall come to change it. It is observed in some statistics on the subject published not long ago

in the *Popular Science Monthly* of the salaries at one of the State institutions of the West that the income of that institution had doubled in the last seven years, and the average salary had increased ten per cent. Doubtless the remainder of the increase was spent on very worthy objects; but it appears plain that unless there were definite restrictions on the increase of income, the trustees *might* have doubled the average salary had they seen fit. They probably did not consider it needful, and it surely was not from their standpoint, supposing they could hold their professors, or get others equally good without doing so. A professor asleep in that Utopia we heard of is not nearly so stirring a sight at Commencement as a new gymnasium.

Thirdly, it may frequently have occurred to some of those present to endeavor to influence salaries by the formation of a trades union. The absurdity of this plan is not quite so great as it appears to most of you. Other learned bodies (by whom I mean societies of doctors and lawyers)—other learned bodies have followed some such steps. The joining together of doctors for the purpose of regulating the fees for their professional services is not, I think, unknown. I have never heard of a trades union of college professors. I have heard of what seems to be an attempt in that direction, when an invitation was sent out to all members of a respectable professional organization to boycott a certain institution by refusing to accept positions there. That notes a possibility. Whether it be an adequate possibility is for those who will discuss this question to determine.

Another recourse for the professor, and the most obvious one, and the one put in practice very frequently at the present time, is to do outside work. It would seem that this is a very good solution of the difficulty. "A professor is paid," one may hear it said, "for eight months' work; and during those eight months he does not do more than three or four hours a day." There are many professors who do much more and many who do much less; but if we take twelve recitation hours a week, and suppose a man would take an hour in preparation for a week's work, we shall hit a good many cases. This work does not all come at convenient times; but it may mostly be arranged at the desire of the professor. Counting the summer vacation, then, the professor

has about twice as much time at his control as he has to give to college work, and, supposing him to be paid at the same rate, the salary may be practically three times what it appears on the college books, making a sum total that he can live on very comfortably.

We have all heard or made calculations like that; and we know, of course, that they are somewhat misleading. The professor never has so much time at his disposal; and even if he did, he could rarely find any work which is even as well paid as college work. Some men, especially in branches that have technical applications, can do so; but most cannot. However low the college salary may be, it is munificent compared with literary hack work, so far as I am acquainted with that useful stopgap; but whether it be remunerative or no, the whole idea of outside work is, to my mind, on principle, false. I have done a great deal of it myself, and I am afraid it would have been better if I could have avoided it. It is well enough for a college man to publish a book or two, or something of that sort; but, with reference to college, we may say (I think you will agree with me), that in most colleges the professor will find ample and useful occupation for his time, even beyond his college work, in taking an interest in college study and college life, and also (here I am not speaking humorously)—also, in cultivating a leisurely frame of mind in which he can think of interesting things. This last occupation may seem amusing; but the leisurely professor is, other things being equal, much better for the college than the professor who is always on the rush. He has time to think of his work and of the fellows for whom he works; he has time to consider the necessities of the college; he has time he can make his own, he has time to make the college the center of social life. If he keep his nose to the grindstone he has no time for these excellent things.

The next suggestion that I make is that a college professor should increase his salary by speculating in stocks. This seems to you a very strange solution, doubtless; and I have merely mentioned it because it seems to be a practical one. Not that I speculate myself; but I receive by mail a great many invitations to do so. I receive a good many invitations to invest my savings in enterprises recommended by one or another firm of

brokers of whom I never hear otherwise. As there is no personal reason why I should get such things more than anybody else, I suppose it is because the people who want to advertise their speculations consider college professors to be fair game. It shows to what a pass our conditions have come that I should be allowed to mention this matter at all. It surely is too much of a temptation.

The last posibility that I mention is that the college professor should marry a rich wife. It would seem to be greatly to their peace of mind and to the advantage of the institution with which they are connected. It might even be made a matter of regulation. It is not so absurd an idea as it seems to some of you. In the German army, as I used to be informed, an officer was not allowed to marry a lady with less than a certain income. This matter is not so different. The class of the college professor is a species of aristocracy that only needs money to be highly respected. Now, what better than that the wife of a man of learning should haply be able to relieve him of bothers and worries, to give him time for his learned labors, to give him books and opportunities for scholastic research, to give him that social standing, which is such a great help to his work! I shall certainly interpose no objection. If I did, doubtless the learned works now produced in the leisure hours of well-married professors would rise up in the mind of every one to refute my sophistry.

Now let us look at the other side of the question. We have been considering the agreeable matter of increasing the professor's compensation; now let us turn very shortly to the doleful task of limiting his needs. How decrease the denominator? What do we find? It is an enthusiastic Teufelsdröckh that cries: "Make thy claim of wages at zero; then thou hast the world under thy feet." But in a financial sense, to make one's claim of wages zero would tend to make one's wages zero; and that, in a general way, would not result in putting the world under one's feet, but rather in putting one under the feet of the world, or at least under that part of it that walks in cemeteries. We cannot well make our claim of wages zero without acknowledging that we need as professors only what may chance to come in our way. Now that is not usual—making our claim for wages just accord with our need. Consider that lat-

ter. And here we want first, to consider different means actually in operation for decreasing the needs of a college professor; and of these the most important in my mind is the old-age pension, which has already been discussed.

A pension after service is really a present help; although I think one of the preceding speakers held a different view—that it relieves one of the necessities of saving anything for the future. It is possible that being relieved of the necessity of saving will not be much of an economy to many professors. It will not be economy to those who do not save anything. Still, if a man saves nothing, or (what is something of the same kind) keep no life insurance policy, yet even then the certainty of the pension is a moral asset which will be of greater or less value according as the person in question be solicitous as to the future on the one hand, or either positively or a little lukewarm on the other. Let us then put down the present step toward pensions as a step in the right direction. Just at present it may not seem wise to advocate an addition of a life insurance provision; but I am inclined to think that a careful study of the question by experts would show that a life insurance provision would not be very much more expensive than a pension system; or (perhaps we should say, since we are now dealing with what ought to be), would be equally necessary or just. How many of us know widows of colleagues who keep student boarding houses? I have known a number and they seem to me to have had a very charming position among the students. Perhaps it is well that the life companion of one who devoted himself to the intellectual welfare of these bright young souls should continue to keep in touch with them and carry on the beautiful influence of her dear departed by that only way open to her. It may be right; but how many widows of college professors would obey the impulse if they could help it? Life insurance, I should say, is probably quite as right and just as the old-age pension.

But we come now practically from those more external means—we come to those within the actual control of the present professor; and of these the most obvious is that he should limit his desires. Now on this subject I have very little to say. I have endeavored to accomplish the end myself with very little success. I have found that, in spite of my most earnest efforts,

my desires soared far beyond my possibilities; and, further, I have considered, with a view to my own availability in the university, that it was decidedly best that they should do so; so I get into this difficult position here: that if I recommend really that the professor shall control—shall limit—his desires, I advise something which is not for the best advantage of the college in which the professor may be. I shall leave the matter to your consideration and pass rapidly to the third point, which is that without limiting one's desires one should curtail one's expenses. Now this is evidently a question that you all have thought on, too. It is a question on which my wife ought to be heard, rather than myself; and therefore I shall not go further in discussing it. I shall merely offer it to you in my survey of the conditions and pass rapidly to the next subject, which I shall treat in a still more wholesale manner.

The next means is to have a small family. I consider that a very grim solution. I think it enough and more than enough to suggest it; and so I pass to my last consideration. The last consideration which had to do with raising the numerator was to marry a rich wife. The last consideration on the list in decreasing the denominator is—I regret to say—to have no wife at all. This proposition is by no means so absurd as some of those which I have already mentioned. It is well known that it was a universal condition, or pretty nearly so, in the teaching body of universities for a long time—at least for a great part of it. It is the condition of the present day with a great part of one of the professions that may readily enough be compared with the teaching profession, namely: the clerical. There is no doubt that a celibate teaching force has certain advantages. I am not fully prepared with the facts; but I believe this view of life is generally preferred by the ladies who go into the teaching profession. Not that any of them have wives; but, as a rule, they have no husbands. I have never gone over the question with any of them so as to be able to present their views. The plan is not, as a rule, received with favor by my sex. Almost all college professors whom I know are married. They seem to think, as a rule, that it is well that they should be so. I agree with them entirely.

So, then, I have run over the matter (and I see I have already

exceeded the time which is allowed to me)—I have run over shortly some of the means whereby we may more readily increase our ratio of efficiency. You have seen how the compensation of the college professor may be increased and you have seen how his needs may be limited. Which of the propositions, my friends, seems most satisfactory? To me they all seem equally unsatisfactory; and I am therefore led to believe that with whatever means we have at hand for action ourselves under present circumstances, the efficiency of our colleges is very seriously impaired, and that is the main note which I would like to leave in your minds—that under present circumstances the efficiency of our college professors is seriously impaired. It is far too late, at the end of a meeting like this—far too late to endeavor to make any real and practical suggestion. My own idea runs rather in this line—that the professor's salary ought to be considered in a somewhat more commercial or economic manner than is currently the case. Trustees and those who have at their disposal the funds of an institution must of necessity consider economic and commercial conditions in a great number of their expenditures. It would seem to me that in this, also, they should take something more of the same view than has been customary. By no means would I entirely commercialize the question. We all know that there is a grain of sentiment that runs through the college professor's life; it is an extremely valuable thing. By no means would I advocate any plan which should leave out that particular asset that the college has in the devotion of its professional staff; still, even admitting all that, they will be viewing the question in a little more definitely economic and commercial light. We ought to consider what is necessary to get really the best professional service. That question is often not enough thought of. We too often are satisfied with the professional service we can get, without considering whether it be the best the circumstances allow.

BIOLOGY; ITS EDUCATIONAL AND PRACTICAL VALUE.*

James H. Stoller

Contrary to the usual impression, there is no sharp line in nature between plants on the one hand and animals on the other. It is true that the larger and more familiar forms of life possess features which characterize them definitely as either plants or animals. We readily place in one group trees, flowering plants, ferns and mosses, and in another group quadrupeds, birds, fishes and insects. We find quite striking differences between the two groups, as for example, that the former are fixed in one place, have green leaves, and evidently get their food from the air and soil in the form of gases and liquids; while the latter group includes only creatures that move about freely, that require solid food for their nourishment, and possess definite organs for seizing their food and receiving and digesting it within their bodies.

While all this is true and while on these grounds two distinct sciences, that of botany, treating of plants, and that of zoölogy, treating of animals, were until recently recognized, a broader survey of the living world shows that all these distinctions break down. Many of the simplest organisms revealed to us by the microscope are neither distinctly animals or plants. There is an interesting little creature, living everywhere in pond water, called Englena. It is of a bright green color and it evidently utilizes the light and heat of the sun and the carbonic acid dissolved in the water just as any green plant does. Nevertheless, it possesses a mouth, like an animal, and swallows solid food. Further, like an animal, it swims about freely in the water. There are the bacteria, some species of which, if they find access to our bodies, cause disease. They are not classed as animalcules, but are rather called plants. It is true

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that, like animals, they require organic matter for their food, but as they take in their food in a liquid state, absorbing it directly through their surfaces, they are regarded as plants. These and many other organisms stand on the border line between the two great families of living things, joining them together.

It was in recognition of the unity in the living world—of the broad fundamental likeness among all creatures that have life—that about thirty years ago Huxley was led to propose that in the study of plants and animals the old dividing line be obliterated and that they be regarded as one great department of nature and the study of them as one discipline. He prepared a text-book which he called General Biology, the first of many of its kind. Since that time courses in biology as a general science of organisms have been taught in the schools and are gradually superseding botany and zoölogy as separate branches.

As biology is studied in our higher institutions, its subject-matter is treated from quite different standpoints and the science falls into a considerable number of divisions, each of which is a more or less distinct branch of knowledge. Let us notice what these are: There are four standpoints from which any organism may be considered; (1) the form and structure of the body, (2) the activities or life-processes of its body, (3) the development of its body from its initial state as germ or ovum, (4) the history of its kind or species, or, as we may say, its genealogy. The study of organisms in general from these several standpoints has led to the establishment of the following branches of biologic science:

Morphology.—The science of the forms of organisms and their parts, especially as viewed comparatively. It includes anatomy, which deals with structure as seen by the aid of dissection, and with histology, in which the finer structure, as revealed by the microscope, is considered. Mainly on the basis of morphology the science of classification, or the grouping of organisms, has been built up.

Physiology.—The science of the functions of the bodies of organisms; the activities of the parts as organs in maintaining life. In the broadest scope it includes ecology, the science of the relations of organisms to their physical environment. Also under this head psychology, the science of the mental life of animals,

and sociology, that of their social life, may be considered, affording a foundation for the study of the subjects as pertaining to man.

Embryology.—The science of organisms in their history as individuals; the stages through which they pass in their development from the egg to the fully formed body.

Phylogeny.—The science of organisms in their history as races; the stages through which the various types of organisms have passed in their development since life began on the earth. It includes paleontology,—the science of fossil organisms,—and evolution,—the law of the succession of forms and the factors of the process.

We may now consider for a moment the values of these different lines of study. It is evident that educationally they afford discipline in quite a number of different ways. As a foundation for everything else the student must learn to observe and compare, to see things in the world about him and to take note of their likenesses and differences. He may go out in the fields and woods and gain a knowledge of the different kinds of organisms, finding out their names and their place in classification. Perhaps he will make a special study of some one group, as birds or butterflies, ferns or forest-trees, gradually becoming in a small way an authority in the special field he cultivates and, anyhow, deriving a great deal of pure pleasure from his work.

Another line of work is that done in the laboratory. Single specimens are studied in detail, their internal as well as their external features being considered. The parts, organs and tissues of the body are carefully observed, the microscope being employed to see the finer structural elements. The eye and hand are further trained by making drawings of the objects.

Such preliminary training may be followed by more advanced work in the same line and within some special field. Thus comparative vertebrate anatomy may be taken up, consisting of the dissection in detail of a number of types of vertebrated animals. Such a course is of special value to prospective medical students, and in recognition of the value of this and other related work, some of the medical schools admit college graduates to one year's advanced standing. A movement is now on foot to establish uniformity in the medical colleges of this state in making this

allowance of time to graduates of colleges where the biological and chemical courses are up to a certain standard.

The student of biology, besides learning to observe accurately, has plenty of problems upon which he may exercise his thinking faculties. For example, along with anatomy he may consider the physiology of the different organs. What is the function of each part and how does it perform this function? What he has gathered from his previous study of human physiology, as taught in the schools, now becomes real knowledge to him. For, having seen the organs which perform the functions, having studied, for example, the structure of the heart of some mammal, actually seeing the auricles, ventricles, valves, and vessels, he clearly understands the action of the heart and the circulation of the blood. But there are other problems of physiology which will tax to the fullest capacity the student's powers of penetration and analysis; for instance, the problem of the nature of the action of a muscle. Does it undergo a change in the arrangement of its ultimate particles? Are there any associated changes in its chemical composition? Whence comes the energy which it manifests in the act of contraction? And so forth. Once started in such lines of reflection, the student is led to an apprehension of the ultimate problem of biology,—that of the nature of life itself.

Another branch of biology which is of great practical importance is that of bacteriology. One may venture to assert that the development of this science within the last thirty years has been of more importance to the physical well-being of man than all else that has happened put together. Some of the diseases most destructive to human life have, during this period, been brought under control as the result of the knowledge gained of their causes as due to particular species of bacteria. In the past man has been helpless when pestilence has fallen upon him. Such diseases as the bubonic plague and Asiatic cholera have repeatedly swept over large portions of the earth, causing immense destruction of life. Even more fatal, in the aggregate, have been such more constantly occurring maladies as typhoid fever and diphtheria. Now the specific causes of these and other spreading diseases are known. The germs, or bacteria, to the incursions of which in the human body the diseases are due, have

been discovered, their modes and habits of life outside the body have been determined, and the means whereby we can prevent their access to the body have in a large measure been found out.

As an outcome of our knowledge of the biological nature of infectious disease, a new branch of applied science,—that of sanitation or preventive medicine—has developed. We have found that the health of communities is determined by definite conditions. Where there is a pure water supply, typhoid fever is almost unknown; where there is a proper drainage and disposal of wastes, malaria and yellow fever need no longer be feared. Through quarantine measures, such diseases as formerly spread from place to place, often from country to country, are now effectually held in check. On a smaller scale, quarantine and disinfection are effective in isolating local cases of the common communicative diseases.

Important advances have been made, too, on the side of therapeutics or the medical treatment of diseases, as a result of the knowledge of their causes. When, through biological researches, the toxins given off by bacteria,—the poisonous products which are the direct cause of disease—were discovered, a new line of investigation was opened,—that of discovering or producing substances which should act as neutralizing agents to the toxins. The result of this is that anti-toxin remedies are now administered successfully in several diseases, as diphtheria and tetanus.

There are other important applications of our knowledge of bacteria. For besides those just referred to, which are the natural enemies of man, there are a thousandfold more which are the allies of man,—which carry on the beneficent processes in nature. These are the friends of the farmer, for they play a part in enriching the soil, one group of them supplying nitrogen for the food of plants. Others assist in the making of dairy products, butter and cheese. Cultures of bacteria are introduced into the cream or the curds which give rise to flavors which make these foods more palatable. Bacteria are always present in milk and milk products. The task of the dairy bacteriologist is to keep out those which are deleterious and to substitute for them such as give a desirable taste and flavor to butter and cheese.

Another calling which rests on biological knowledge and in

which there has been a revival of interest of late is that of forestry. Schools of forestry have been established at some of the universities, and graduates are in demand for service under the United States Forestry Bureau.

Finally, among the sciences, biology has a unique value on its purely philosophical side. It is to be remembered that the greatest stimulus to the intellectual life of the nineteenth century was given by interpretations of biological phenomena. It may be questioned whether any course of liberal education is complete which does not include a survey of that great forward movement in human thought which began with the publication of Darwin's "Origin of Species." A course of study in biology is a great aid, if not indeed indispensable, to an understanding of that body of literature, scientific and philosophical, which followed the announcement by Darwin of his theory of the casual factors of organic evolution.

APPLIED SCIENCE AND INDUSTRIAL SUPREMACY.

EDWARD ELLERY.

First, I will show how modern science has modified the conditions that formerly determined the industrial supremacy of one section of the country over another. In former times the position which any section was able to assume industrially was almost wholly determined by the presence in that locality of great natural sources of wealth, as metal ores, minerals, forests, water power, etc. Of course the wits of man have always been an important factor in determining industrial supremacy, for where man's ingenuity has not been added to natural resources development has not been as rapid nor gone so far as in those sections where we find "nature bountiful" plus man's genius. The Indian could not have developed New England, rich as it originally was in certain bounties of nature, because he had little intelligence; that is, he lacked power to put two and two together and make four. He could not, therefore, add intelligence to nature. But as soon as the keen wit and superior intelligence of the white race was applied to these resources, New England began to mount to her commanding industrial position. It will admittedly be true always that certain geographical positions, as that of maritime ports for instance, will be advantageous, but such ports under the new conditions will eventually be likely to become centers of traffic rather than centers of industry.

Since the days when the discovery of great natural resources influenced man to follow nature's beckoning finger great changes have taken place, and among others four may be mentioned as specifically influencing industrial progress. First, there has taken place an annihilation of space; second, there has taken place an annihilation of weight; third, power has been cheapened and means discovered of transmitting it from point to point; and fourth, processes of production have been cheapened by applications of scientific principles to industrial process.

First, the annihilation of space. Compare our country today with the country of a hundred years ago. In 1800 we were an insignificant people, numbering scarcely 5,000,000, and the

only means of communication between places were the 21,000 miles of post-road. In 1830, despite the fact that the population had increased two and one-half times, manufacturing interests remained purely local. In that year the railroad appears and immediately industrial conditions change. A new factor now enters commercial life to influence the industrial supremacy of a community. In 1840 4,000 miles of track had been laid, and in the half century that has elapsed since, the mileage has increased to our present 250,000 miles.

Concomitant with this development of land transportation facilities there has been a like progress in the means of inland and ocean navigation. The present lake steamers show as marked development from the first steamers on those bodies of water as do the present locomotives which speed trains at a mile-a-minute rate from the first locomotive that plied between Albany and Schenectady. As far as ocean navigation is concerned, it is only necessary to refer to the vast difference in tonnage between our ocean-going freight and passenger steamers of the present and the sailing vessel of fifty years ago. Here then, in effect, is annihilation of space, for not only are all parts of a country brought into closer means of communication by the railroad, but all sections of the globe are finding themselves more closely united.

Second, annihilation of weight. This development of transportation facilities has been accompanied by a cheapening of freight rates. That means, in other words, that weight as an obstacle to transporting large amounts from one point to another presents now little hindrance to the development of any section as an industrial center. A half century ago the freight rate on ores, for instance, and similar commodities was 4½ cents per ton mile. To-day on the same commodity the rates are as low as 4 mills per ton mile. (These are of course published rates. By how much the latter would be reduced by rebates, had one the power to compel such, can only be conjectured. Presumably in these later days there is not a large discrepancy between published and actual rates). The same lowering in freight rates has taken place in water transportation. To-day 55 cents per ton is the published charge on certain commodities between lake ports, while fifty years ago it was $3 per ton. Ocean freight rates have

dropped to $1 per ton on some articles of commerce between New York and European ports.

Third, cheapening of power and discovery of means of transmitting it. As far as money value is concerned water power is cheapest, this naturally varying with engineering difficulties to be overcome to make it available. If not difficult to confine its flow, the cost rarely exceeds $10 per horse power per year, and in many places is cheaper than that. That is, of course, cheap power. Steam power is more expensive than water power in many ways, but especially because there is a great loss of energy in the use of the steam engine. The fraction of energy obtained from coal by means of boiler and steam engine is not greater than 10 per cent. If it were possible to recover 50 per cent. of that energy cheap power would be assured. Is such a thing possible? Let us see.

We know, for instance, that by oxidizing zinc in an electric cell the fraction of the energy of chemical action returnable as electrical current is 90 per cent. But zinc is expensive fuel. If coal or coke could be used in the same way in the battery, and 90 per cent., or 70 per cent., or 50 per cent. of the chemical energy of its oxidation made available, then we would have cheap power. For fifty years man has attempted to develop the carbon cell and many patents have been issued. None of the inventions has as yet proved practical. But man will find the secret, for physical and chemical science admits the possibility of such a cell. When the secret is discovered there will be another revolution in industrial method.

Power is now transmitted in the form of electrical energy. At present the distance over which it may be so transmitted is limited, but is being extended every year. The Niagara River Company, utilizing 70 per cent. of the power available from the fall of the water and losing only a small per cent. of that in the dynamo, can supply power to a manufacturing plant in Buffalo at a cost of $12 to $15 per horse power.

Fourth, the cheapening of process by application of scientific principles. This cheapening of process may result from discovery of new principles or new applications of old ones or from the preventing of waste and creating a market for by-products. Quality and price of iron in any of its marketable forms is large-

ly determined by the practical scientist who perfects present methods of getting iron from its ores, discovers methods of extracting it from ores which are now discarded, devises better methods of converting it into steel, etc. It has been only in recent years that man has learned how, by preventing waste, to save values as well as to create them. Man has been a wasteful creature. When copper was first reduced from its ores, any ore of the metal which contained sulphur was held to be valueless. Large amounts of such ores in one of our western mines were not only discarded but were ground up and run into a river to be washed away by the current of the stream. Nowadays copper is not only reduced from its sulphur ores, but the process is a cheaper one than that by which the one-time highly valued ores were reduced. By the method of to-day that discarded and wasted ore, although yielding but a small per cent. of the metal, would be worth a large sum. If all that was wasted of the famous Comstock lode, amounting it is said to 40 per cent. of the whole, had been saved, Nevada might still be a rich state. For many years 30 per cent. only of the coal veins in Pennsylvania was recovered, and only the best veins were worked, the rest being left as supporting pillars or thrown out in large amounts of waste. Many parallel veins which did not promise such rich results for working were passed by and now are almost irretrievably lost by caving in or crushing.

The values represented by these and other examples of waste that might be given are measured only by vast sums of money. Man knows better now, knows how to save values by preventing waste or by converting it into valuable by-products of manufacture. It may well be prognosticated that on this basis, namely that of saving values, man may some day come to appreciate properly the value of a human life, and eventually recognize the infinite value of a human soul.

Second, having shown what the new conditions are which determine industrial supremacy of a community, we may note some of the effects. In these days, when abundant natural resources invite man to go to this or that locality he does not usually respond, nor does he need to respond, by going himself. He has but to send his iron messenger instead and bring nature's gifts to his own door. In former days, let a great deposit of iron

ore be found in any place and in a little while a community would spring up in that place. Especially would this be the case if fuel were also near at hand. If fuel and ore were in close juxtaposition what a supreme industrial prominence such section would assume. But to-day this result would not be so certain to follow. If fuel and ore were found together in some inhabitable region of the Arctic Circle, it is to be doubted if that spot would ever become a center of metal manufacture, even if that were the sole known occurrence of that metal ore. The following illustration gives point to the doubt.

Before the days of the railroad, manufactured products were the outputs of local concerns. Iron, for example, was produced at any place where ore and fuel were found, even if the quantity was meagre, for to transport fuel and ore over bad roads was not as economical as to manufacture the metal in the small local furnace. With the development of railroads and the accompanying lowering of freight rates these small blast furnaces have disappeared. That is to say, ore and fuel need no longer occur as near neighbors to occasion the development of any place into a smoky city. Iron ore is found in Minnesota, but we do not to-day find a blast furnace there. The ore is shipped to Pittsburg, converted into rails by the superior facilities of the large plants there, carried back to Minnesota and sold at about one-sixth the price it would have cost to produce it twenty-five years ago in the place where the ore was found. Both Minnesota and Pittsburg profit by the effects of the annihilation of space and weight as well as by the cheapening of process.

Copper and lead ores are now transported great distances (that is, great from the point of view of a quarter of a century ago) to bring them to places where they can be economically reduced. Butte copper ores are transported thirty-eight miles to Anaconda for reduction. Ore from other mines in Montana is transported 176 miles to the smelting furnace. A very striking illustration of the effect of this annihilation of space and weight as obstacles to industrial progress is given by Dr. Douglass.* Crude copper is shipped from one of the southern states by boat and rail across the continent, then carried into the interior of

* The writer desires to acknowledge his indebtedness for this and other illustrations to a little book of "Addresses" by Dr. James Douglass.

Mexico, there saturated with gold and silver, and brought back to New Jersey for electrolytic separation of the metals. In spite of the long journey (twice across the continent for copper) the metals appear in markets in the east in competition with metals of the same kind which have not been so transported.

A copper mine was recently discovered in an inaccessible portion of the State of Washington. Instead of transporting labor and machinery and fuel in vast quantities to that mine, the owners buy power from an electrical plant in Tacoma some miles distant, and the ore extracted by electrically impelled machinery is transported some distance to the smelting furnace. Buffalo is about as well off to-day as far as cheap power is concerned as if it were located immediately at the foot of Niagara Falls. Because of this recently discovered means of transmitting power man has already begun to pass by natural sources of power and even to discard some already in use. If he is overlooking and abandoning these natural powers which are certainly cheap, either to make use of the same power electrically transmitted to a new locality, or for any other reason is making use of the dearer steam power in a new place, how many water powers will be overlooked and abandoned with the discovery of a method of converting into power larger fractions of the chemical energy of the oxidation of coal?

Pittsburg is a great iron manufacturing center to-day; primarily because there occur in this vicinity vast deposits of coal and iron ore; but this is not the only reason. In 1875 a wily Scotchman employed a practical chemist who determined for the man of business the beneficial effect of the presence in iron of minute quantities of chromium, nickel, manganese, carbon, etc. Iron manufacturers in Europe had taken advantage of the application of science to this industry some years before and could at that time make better steel rails than were made in the United States. Now we are doing what the European furnaces can do and are even competing with them in their own markets. That is to say, by the application of science to this industry, in the discovery of new methods or the perfecting of old methods, the process of production of steel rails has been greatly cheapened.

A few years ago the escaping gases and the heat for a long time discharged into the air from blast furnaces found economical

use in the hot blast of the smelting process. To-day, with the frozen blast likely to replace the older hot blast, the hot gases can be used to drive gas engines and will prove to be a very cheap form of fuel for the immediate locality. The next step in cheapening of process will take place in the direction of electrolytic reduction of metals from their ores, now apparently of such universal application. Thus, changes in process which cheapen the cost of production are constantly taking place and there is constant advance to better quality.

A single illustration of the tremendous value of by-products will suffice to show the effect of prevention of waste. In the production of coke in this country there are about 2,000,000 tons of by-products, among which tar and ammonia are the most important. The value of these products amounts to about $28,000,000. Forty per cent. of the gas produced by the coke is allowed to go to waste, despite the fact that the heat of it represents more horse power each year than the horse power of Niagara Falls. These values are in addition to the value of the coke itself. The tar can be used as the source of dyes and flavoring and perfume extracts; the ammonium salt can be used as the source of an artificial fertilizer; and the power represented in the heat of the gases could be used to run a dynamo to induce electricity which could be transmitted to some manufacturing center.

Thus we have shown some of the ways in which applied science affects industrial supremacy of a community. The scientist does not, of course, work alone. He must have assistance from the mechanic to build machinery, from the engineer to build the railroad, from the capitalist to supply funds and business ability, and from the statesman to make wise laws to further, and not to restrain, trade. We have also shown how these four influences have worked together in such a way that within the limits of the United States man is not longer required to establish his manufacturing plant where nature supplies the bounty. He does not even carry the bounty to the place where great natural power is, but the rather to the place which, by the adoption of science to development of raw material, has become industrially supreme. All parts of the United States are equally benefited by the decreased cost of production, improvement in

the quality of product, and increased supply. Minnesota and Pittsburg are alike benefited by the fact that modern conditions have determined that the latter shall be for the United States the center of iron manufacture;—Pittsburg, because it is evident that its usefulness in the production of iron is not limited to the reduction of the ore occurring nearby, and Minnesota because steel rails can be better produced and more cheaply, even out of Minnesota ore, at Pittsburg than within her own borders. The principle, then, seems to be pretty well established, as far as the United States is concerned, that all sections are about equally benefited by the development in some one place of a large manufacturing plant producing one article of commerce of best quality at cheapest rate. The working of the principle is not yet perfect because man has not yet learned the best use of merging small factories into one large one, and because also interstate trade is not perfectly free, owing hitherto to defective laws governing such trade. But the principle is clearly enough established to show without doubt the tremendous benefit to all people of the United States of this localization of industry. And it is evident that the industrial supremacy of certain localities is a resultant of at least four forces; namely, the annihilation of space and of weight, the cheapening of power and possibility of transmitting it, and cheapening of process by applying scientific principle to development of raw material.

Why not extend the principle to make industrial supremacy mean something larger than a question of whether one community shall be bigger than another. As far as the United States is concerned it is no longer a question of where iron products shall be manufactured. We have learned it can be done best in a small number of places. Therefore the question of industrial supremacy is no longer one of whether Pittsburg shall be bigger than Chicago, or New York City than San Francisco, or New York State than Massachusetts. Why should it be a question of whether America should be bigger industrially than England, or Germany than France? Industrial supremacy may be a larger matter than the mere dominance of one locality over another, of mere supremacy of one country over another which is manufacturing the same products. It may mean in the broadest sense that just as one community in the United States is now produc-

ing for the people of the United States the best and cheapest product, in some one line, one nation may be doing for the race the utmost possible in the best way possible in the matter of production: that is, become supreme in producing the best at least cost, not for the benefit of a few, nor yet the aggrandizement of a community or country, but for the benefit of the world, a race. It is very evident that, so far as the United States is concerned, its wealth belongs to all the people within its borders. In a similar way it is already appearing that the resources of nature, wherever found, belong not to any special section but to nature's dominant species, the race of man. The annihilation of space and weight, the development of cheap power and the cheapening of processes are already working together for the benefit of a world of people. For example, chromium ore is brought to this country from the central portions of Asia Minor, is reduced in Virginia and the metal used in the manufacture of ferro-chrome. Away up in the Arctic Circle, in Sweden, iron ore has been found in vast quantities, that has been made accessible to European states by railroad and water transportation. Some of it is being actually transported 1,200 miles. Even America is delivering iron ore in Antwerp, Belgium. In the Hudson Bay region there are also vast quantities of iron ore deposits, and the question we naturally ask is, "Who shall benefit by it? Shall Germany, which it is recorded has recently contracted for transportation of 14,000,000 tons of this ore, or shall America also be a sharer in this bounteous gift of nature? Shall Sweden? Shall France? Where shall it be manufactured into iron products; in Pittsburg or in Stettin, Germany, or in some blast furnace in Sweden?" Is not the answer to that question this? "It should be developed in that place in which it can be done best and cheapest and for the benefit of the whole race."

As an illustration that man is coming to recognize the fact that the resources of nature belong to the race and not to any section of it may be cited numerous instances. California has obtained coal from New South Wales and sulphur from Japan. The Englishman gets his mutton from Australia. The Dakota wheat farmer no longer markets his product in a single state or nation. Our beef and pork feed a world.

We think of ourselves to-day as a tremendously rich people, and we are,—so rich that the figures are almost staggering. Contrast our wealth to-day with our wealth ten years ago. In 1896 the production of coal in this country amounted to 170,000,000 tons, last year to 400,000,000 tons. Ten years ago we were producing 8,000,600 tons of iron; to-day, 25,000,000 tons. In 1896, 240,000,000 pounds of copper were produced from our mines, and last year that amount was increased to 900,000,000 pounds. The value of the minerals taken from our mines in 1896 was $625,000,000. The value of our mineral product to-day is nearly $2,000,000,000. Who shall benefit by this bewildering prosperity? We aren't the only country that is prosperous. Other portions of the world are passing through an epoch of industrial and commercial prosperity. Belgium and Holland and Switzerland all report a large increase in wealth. Who shall benefit by the prosperous conditions in those countries? With the conditions modified, as we have shown they are, which determine the industrial supremacy of any community, why may not all the bounties of nature wherever occurring be developed for the benefit of a race?

It is very evident that this has begun to be the case, for last year the United States exported $700,000,000 worth of manufactured products, competing in the markets of Europe, in spite of cheap labor there to be obtained, with European manufactures. But we are only third in the list of exporting nations, England and Germany surpassing us in the value of export products, and Belgium and Switzerland follow after us; but it is to be noted that not much comes to the United States from these countries. In other words, that means that all peoples alike may, if man place no obstruction in the way, benefit by nature's gifts, in whatever section they may be found. The resources of nature belong to nature's dominant race, and not to any section of it. And it is possible in these days to develop a world's resources for a world of people. Man may and does obstruct by abnormal obstacles, but he will not do so much longer. Why not allow the natural law to take its natural course for the benefit of a world of people, even as it has done in these United States for the people of the United States? Of course, it means for us the loss of some of our so-called infant industries. Infant! It is

very evident that these industries are sturdy and strong to-day, else how could we compete with European markets to the extent of $700,000,000? Why should we not welcome any influence which, working quietly so as not to greatly disturb existing business conditions, will enable Americans, Italians, Germans, Frenchmen, all people in whatever part of the globe they live, to become equal sharers in nature's bountiful gifts developed by the ingenuity of man in any part of the world? To-day we do not all share alike. We in the United States have foolishly placed a barrier about ourselves, thus saying in effect that we do not care to be benefited. A little way back we spoke of the beneficial effect on the manufacturing of steel rails of the employment of a chemist in the great works at Pittsburg, enabling the American furnace to turn out a product equal in quality with that of European furnaces and which undersells the product of the European manufacturer in his own market. The barrier that we have have placed about us prevents us in this country from benefiting by that cheapening process, for we pay $8 a ton more for steel rails than do even our neighbors in Canada for the same product from the same plant. Obviously that is most unjust. If applied science adapted to nature's bounty makes possible the best production at cheapest rates of steel rails in Pittsburg, then let it be done in Pittsburg, but for the benefit of the race; if in Stettin, then in Stettin for the benefit of the race; or in Stockholm, Sweden, then in Stockholm, but for the benefit of the race. It is not only unchristian, it is unnatural, to obstruct the working of these conditions which make that racial development possible.

Thus we have shown how, by the development of means of communication and the lowering of rates of transportation, by cheapening of power and process of production, conditions of industrial supremacy have changed. We have shown how mankind need no longer go to the place where nature supplies the bounty, but may bring the bounty to his own door. We have shown very clearly that within the limits of any country the best benefit to be derived by the citizens of that country from decreased cost of production and increased supply has been brought about by the centralization, due to the influence of these conditions, of large manufacturing plants in certain localities. We

have shown how it is possible that in this same way the whole race could be equally benefited. All that is needed is a common inspiration to bring about the larger results. If the scientist, and the mechanic, and the civil engineer, and the capitalist, and the statesman were working together with this common inspiration, the development of a race, racial progress, and because of that, national progress, would be made in its widest range.

PROFESSOR WENDELL LAMOROUX.

An Appreciation by his Friend and Former Pupil,
Sidney G. Ashmore.

Professor Wendell Lamoroux was born on November 10th, 1825, in Albany, New York. His father was Judge James Lamoroux (more correctly spelled L'Amoreux), a prominent lawyer of Albany, though a native of the town of New Rochelle, West Chester County, N. Y. Professor Lamoroux's ancestors on his father's side had emigrated from the town of Rochelle, in France. His great-great-grandfather, who was a Huguenot, had fled from that city with his family, on the revocation of the Edict of Nantes, and had settled in the neighborhood of the future city of New York; the place of settlement being named after the French city which he had left. But Professor Lamoroux's grandfather removed, with his family, from New Rochelle to the town of Rensselaerville, in the County of Albany, and in the neighborhood of this little village Professor Lamoroux's father grew up, studied law, and was admitted to practice as attorney and counsellor in the Supreme Court of the State of New York, in the year 1815, and afterwards as solicitor and counsellor in the Court of Chancery. In the year 1820 he was appointed to the Judgeship of the County Court of the City and County of Albany. The receipts from the practice of his profession, united with several very successful investments in real estate, caused him to grow rich, and enabled him to leave a fair fortune to his son, who is the subject of this sketch. Professor Lamoroux's mother was a Miss Wendell of Boston, and a first cousin of Mr. Wendell Phillips.

Sprung from such ancestors as these Professor Lamoroux began life with sufficient means at his command to enable him to cultivate to the full his very marked and varied talents. The earlier part of his life was spent in doing all those things which are most conducive to intellectual development and culture. He

studied in Europe as well as in this country. He read widely in four or five languages. He devoted much time to both ancient and modern literatures and to art, and he was withal a psychologist and philosopher of no ordinary type. He was remarkable for his knowledge of French and for his Parisian accent, as was not unnatural in one of his birth and ancestry. He was nothing if not cultivated, gentle and refined. His good taste in art was perhaps unparalleled among those who make no pretense of a technical knowledge of the subject. He read books, not so much for the information they contained as for the purpose of getting at the mental traits and characteristics of their authors. Both books and art were to him sources for research into the workings of the human mind. He studied them to get at the men who were behind them; and having this purpose ever in view he was always interesting in conversation because he was always human.

Professor Lamoroux was essentially a modest man—too modest in fact for the highest good of his friends and contemporaries, for he had much of value to communicate, which his diffidence often compelled him to withhold. But when he was moved to unburden himself to a friend, then truly "from his lips flowed speech sweeter than honey." In fact a Nestor was he in the daily walks of life—in conversation with his acquaintances, in the drawing-room, or in the College class-room. It was once my great privilege to be his pupil. He was then a young man—a Tutor in Rhetoric and History in Columbia University. It was in the year 1868-1869. I can see him now as he stood by his desk in the old college in 49th Street. He was tall and handsome, with an intellectual countenance, and a mass of dark brown hair above his finely cut features. The lessons he imparted to the Freshmen of that institution might better have been given to more mature students. But much that he said has stood by them, I am convinced, from that day to this. His teaching was unusually attractive, for it proceeded not only from the fulness of his heart, but also from the plenitude of a learning that was founded in careful and original thinking. Of all the teachers I have known (and I have known many in the last thirty years) he seems to me to have been the most independent in his methods, the most truly thoughtful, and withal the most sincerely

anxious for the good of his pupils, in all matters appertaining to the intellectual and moral life. On the mental side of life he made much of the importance of correct and rapid observation. "To observe accurately, fully, and without loss of time," he would say, "is the most desirable of intellectual acquisitions." Apparently a simple matter this, it would seem, but in reality a rare accomplishment, in his estimation! He had a system, and this system he imparted to us in the class room—to our everlasting benefit. One point connected with his system I recall with more than ordinary vividness. We were instructed to note the form or shape of a thing before we allowed the mind to dwell on its color, or other qualities. This, he would say, is logical, and distinctive of a properly trained mental habit. Following this, there came a list of the more common qualities of things, to be observed in their logical sequence—a list to be committed to memory as a guide to a true understanding of one's general environment. This may not have been rhetoric. But there certainly was education in it all, and perhaps more especially so, since it was accompanied by regular practice in essay writing, based on the doctrine thus laid down.

The fundamental idea which underlay this teaching was that of proportion. A sense of true proportion, a capacity to grasp the eternal fitness or exact relations of things, was the faculty which needed the most strengthening in the young mind, according to Professor Lamoroux's often expressed opinion, and to develop this faculty, he thought, was the particular duty and function of the teacher.

With this idea of proportion he associated his code of ethics —for in his view the intellectual and the moral sphere were inseparable. I recall his saying to me one day that sin was chiefly, if not wholly, owing to the lack in the sinner of a due sense of proportion; that the man who possessed this sense in large measure would be guiltless, throughout his life, of grave error. I am aware that this idea is not altogether new; nor did he claim that it was; yet his way of laying stress upon it, and of attaching importance to it, and of applying the principle to the various temptations which beset the young, was undoubtedly the result of much original and careful thinking on his part. No doubt both ancient and modern philosophers have said the same before

him, in one form and another, but few have said it either in a more convincing manner, or in a more earnest spirit.

In his religious views Professor Lamoroux has been referred to as peculiar. It is true that he was barely orthodox, as that word is now understood. But his religion was sound, nevertheless. He put his philosophy before the church, but not before his religion. Indeed his religion and his philosophy were closely interwoven, so that even he could hardly differentiate them. He was a sincere believer in an all-wise and beneficent Creator. In no sense was he an atheist. He may have been what some persons call a theist, for his ideas about Jesus were drawn from an independent study of Holy Scripture, and were in many respects at variance with the teachings of the churches. The doctrine of the Trinity was to him a stumbling-block; yet he placed Christ above all else that is human. Many a time have I talked over this matter with him in the last quarter of a century. I have heard him say that Jesus was the chief expounder in history of the doctrine of Brotherly Love; that although other teachers had touched upon the universal brotherhood of man, none had so impressed it upon humanity at large both by precept and example. The principle expressed in the words, "love your enemies," was at the foundation, he claimed, of all that Christ had said and done on earth, and, since this was the greatest of all ethical teachings, Christ was the greatest of all prophets and expounders of the truth. Yet he looked upon the Christian church as having been the source of much error in human affairs, and he used to say that even the teachings of Jesus might have been given to man in accordance with some simpler and more direct method—a method that would have afforded less room for doubt and uncertainty. "This is a ram-shackle world," I have heard him repeat, "and one more full than is necessary of contradictions and injustice." In the best sense of the term, he was a free-thinker. He reached his own conclusions by a careful process of observation and comparison. He would allow no man, nor body of men calling themselves a church, to think for him. But he was honest in his convictions, and his views always commanded respect and attention. Nor were the latter so far removed, as some unthinking ones have permitted themselves to imagine, from the orthodox tenets of the Christain Faith.

As a man Professor Lamoroux was honest and upright in all his dealings. This fact needs no confirmation from such as I. He was also beyond measure sympathetic with his friends; yet his sympathy carried with it no suggestion of condescension. He seemed always to think more highly of a friend than that friend seemed to himself to merit. Yet neither his manner nor his speech ever stooped to flattery. His personality was winning; his character denoted simplicity; his faults (if he had any) were barely sufficient to emphasize his humanity and his loveableness. Perhaps the most noticeable trait in his general "make up" was gentleness. He was uniformally kind, and thoughtful for others. In many respects he was an optimist, for he looked upon human weakness and mistakes as generally pardonable, and often as the mere indices to less conspicuous virtues. One of his favorite quotations was the saying of La Rochefoucault, "il a les défauts de ses qualités." One was safe to meet with genereous criticism at his hands. His life seemed to be spent in making allowances. Such a disposition sometimes suggests weakness. In Professor Lamoroux it indicated strength, for it was the result of breadth of view and an uncommon charity. He was a keen observer of human character. This was true of him in a very real sense. That "the greatest study of mankind is man" was one of his chief tenets, and he spent much of his life in an endeavor to solve the problem of human existence.

Like Pliny the Elder he had the habit of making many notes. Almost any scrap of paper that came to hand would serve his purpose. These notes had reference to the problem just referred to, and once were meant for publication. Often have I urged him to put them together and give them in book form to the world. I cannot but think that they would have thrown light on some of the difficulties now agitating students of the human mind. I am confident that they would have proved of value not only to the psychologists, but also to the general reader. But the labor of selection and rejection, of collating many papers and manuscripts, even though these were his own, and of adjusting the various parts of such a book so as to make out of them a connected treatise—this was irksome and distasteful to him, and he admitted as much as this to me in a talk on the sub-

ject which took place about ten years ago. He burned his entire manuscript a few years before his death.

Hence the world will never know him through what he has written. But his friends have known him, and will pass on a loving word about him to others; and wherever the name of Union College shall be spoken, there his life and work and influence will be remembered. For many years he has been thought of on College Hill as one of the grand old men of Old Union. There are few in the Faculty now who knew him in earlier days; he belonged more properly to that older company of scholars of whom only one is now left on College Hill—the much beloved Professor Emeritus, Dr. William Wells. Professor Lamoroux was the last member of that distinguished group of Union Alumni, which included such names as Tayler Lewis, Isaac Jackson, Jonathan Pearson, John Foster, Harrison E. Webster, and Eliphalet Nott Potter. Among these, with Elias Peissner, Henry Whitehorne, William Wells and Maurice Perkins (who were not graduates of the college) he lived and moved on terms of friendship and intimacy; and not one of them but was the richer and the happier for having known him!

Professor Lamoroux had his ups and downs in life. Many years ago he lost the larger part of the fortune which he inherited from his father, and at the time of his death he had long been a comparatively poor man. I recall a conversation I had with him once on this subject, in which he expressed his indifference to the loss of his money, so far as his own personal comfort was concerned, though he regretted it on account of his wife, and would have felt it still more if he had had children. It was characteristic of him to cultivate a certain stoical evenness of temper, *rebus in arduis.* He was indeed a man "who fortune's buffets and rewards had ta'en with equal thanks." But this peculiar *"aequanimitas"* was in no degree a pose. He came by it through nature and training.

Professor Lamoroux graduated at Union College in 1844, when he pronounced a Commencement oration in Italian. Afterwards he went to Europe,—in a sailing vessel. Shortly after his return to Schenectady, or at least as early as 1850, he became Professor of Modern Languages and Assistant Professor of Belles-Lettres in Union College. Subsequently Professor Peiss-

ner was appointed to the chair of Modern Languages, but Professor Lamoroux resumed the work of this department when Peissner went to the War in 1862. "I want you to take charge of my work," said Peissner to Lamoroux, at that time, "for I can trust you to give it back to me on my return." In 1864 Lamoroux gave up his work at Union and went to New York, and in 1868 accepted the position already referred to, at Columbia University. He left this post in 1870, and in 1875 was appointed to a professorship at Wells College, Aurora, N. Y.; but in 1876 he returned to Union College to take charge of English Essays and Oratory. In this department he worked until 1885, when he was placed at the head of the Union College Library. There he remained until 1897, when he was made Emeritus by the trustees. He never left Schenectady, to live elsewhere, after 1876, and when I came to Union College in 1881 I enjoyed the very pleasant surprise of finding him a resident there —for I had lost all trace of him after his departure from Columbia in my student days.

In 1864 Professor Lamoroux married Miss Mary Sharratt of Schenectady. The wedding was celebrated on Christmas Eve in old St. George's Episcopal church. They lived together for forty years, "*mira concordia, per mutuam caritatem et in vicem se anteponendo,*" and then were separated by his death, which happened on the first day of April, 1907, in the little house in Nott Terrace, not far from the college,—the house which had been their home for many years.

University Notes.

UNION COLLEGE.

Enter in at the Blue Gate. Take notice. There is a new road. There are new side lawns. The trees have been trimmed, —the dead ones removed. And the good work is going on. Mater renews her youth with the springtime and is looking charming.

The seniors honored with stage appointments are: Raymond S. Bennett of Schenevus, Harold Gardiner of Hadley, Fred Girvin of Schenectady, Lewis S. Parsons of Liberty, and Albert H. White of Manchester, N. H.,—these of the academic courses; and of the engineering courses, Andrew O. Avery of Delanson, Howard E. Bishop of Sayre, Pa., Hugh G. Davis of Lynchburg, Va., Alexander Nicht, Jr., of Auburn, and D. H. Osborne, of Liberty.

The Sigma Xi Society met at Silliman Hall on Tuesday evening, May 7, and elected the following members from the Class of 1907: Andrew Ordell Avery of Delanson, Howard Elmer Bishop of Sayre, Pa., Hugh Garnett Davis of Lynchburg, Va., Fred Girvin of Schenectady, Alexander Joseph Nicht, Jr., of Auburn, D. Henry Osborne, 2d, of Victor, and William Earl Weller of Schenectady. After the election and initiation Professor Steinmetz addressed the Society on "Light and Illumination."

Charles M. Jesup of New York, as representative of the Intercollegiate Civic League, addressed a gathering of professors and students in Silliman Hall on Saturday evening, April 13. His subject was "Americanism." On the following Wednesday evening a chapter of the League was organized at Union. The object of the organization, which is non-partisan, is to interest college men in civic problems.

Our very welcome guest and friend, Dr. Hamilton Wright Mabie, lectured in the Chapel on Thursday evening, May 9, on "Literature, New and Old," to the entertainment of a large audience.

The Rutgers-Union Debate was contested in the Chapel on Friday evening, May 10. The question was: "Resolved: That the growing tendency toward centralization of power in our Federal Government is a menace to the welfare of the United States." The Union debaters, supporting the affirmative, were Edwin L. La Crosse, Thomas E. Hanigan and Arthur B. King, all of the Class of 1908. Rutgers was represented by F. Marmaduke Potter, 1909, Luman J. Shafer, 1909, and George A. Leukel, 1907. Martin H. Weyrauch, 1908, was captain and alternate of the Union team, and Solomon Esberg, 1907, was alternate for Rutgers. The judges of award,—A. S. Downing, LL.D., of the New York State Education Board, J. F. McElroy, President of the Albany Chamber of Commerce, and the Rev. C. P. Cherry of Troy—decided the debate in favor of Rutgers and the negative.

At a meeting of the senior members of the board of editors of the *Concordiensis,* held in Silliman Hall on Tuesday, April 9, Martin Henry Weyrauch, 1908, was elected editor-in-chief; Mark Skinner Watson, 1908, literary editor; Philip Foster Shutler, 1908, athletic editor, and Andrew Van Vranken Raymond, Jr., 1908, news and alumni editor. Howard Sylvester Parsons, 1909, was elected associate editor, and Cavert, Vedder, Van Deusen, Walser, Freeman and Ferguson of the Class of 1909 were appointed to the reportorial staff.

The Skull and Shield Society gave a dance at Yates' Boathouse, on April 6. Kappa Alpha gave an informal dance on Friday evening, April 19. The Glee Club and the Quartette sang and Mr. Carl Wachter read at Vischer's Ferry on Wednesday evening, April 24. The Pyramid Club dined at Cryne's restaurant on Thursday evening, April 25, and the juniors at the Edison Hotel on Friday evening, April 26. Psi Upsilon and guests danced on Saturday evening, May 4. So there you have the poetry of motion, melody and indigestion.

Professor and Mrs. Ashmore entertained the senior class on Friday evening, April 12, on which occasion Mr. Stead gave an illustrated lecture on "The Birds of New Zealand."

College meetings meet again. We rejoice. Campus meet-

ings "flourish in song," as Euripides says of the virtuous. They also flourish in yell and speech. Good. We rejoice in all expressions, vocal or other, of the vigor, high spirits and sanguinity of youth. And campus meetings, by the way, are a good thing.

Dr. Raymond's three volume work on "Union University; Its History, Influence and Characteristics," has come from the press. We shall notice it at length later.

The base ball scores of the season hitherto have been as follows: April 13, West Point 5—Union 0; April 20, Williams 12—Union 2; April 27, Union 3—Pratt Institute 2; May 1, Union 6—Albany Law School 1; May 4, Union 8—Trinity 2; May 9, Rochester 2—Union 0. We have a good nine.

The *Garnet* is out. So are we. Therefore, *hic finis fandi.*

Alumni Notes.

THE GENERAL ALUMNI ASSOCIATION.

The Executive Committee of the General Alumni Association is making every effort to secure a record-breaking attendance at the coming Commencement. Our average attendance is about two hundred; the registered attendance at the Centennial Commencement was five hundred. The Committee has sent out a circular to all alumni giving them information regarding the Commencement of 1907 and asking them to signify whether or not they will be present. Alumni have furthermore been asked to state their preference for alumni trustee. The committee has also been in correspondence with the officers of reunion classes with a view to securing large representations from those classes and definite appointments of speakers for the Alumni Dinner.

Through President Raymond, the Executive Committee has requested the Board of Trustees to adjourn at eleven o'clock on Tuesday morning of Commencement week for conference with the alumni on college affairs. In any case, the Rev. Dr. George Alexander will at that time address the General Association on behalf of the Board.

The officers of the General Alumni Association are: J. Newton Fiero, '67, President; Frederick P. Bellamy, '68, Vice-President; Marvin H. Strong, '96, Treasurer; the Rev. W. N. P. Dailey, '84, Secretary. James Heatly, '79, Charles C. Lester, '70, Nicholas V. V. Franchot, '75, Edgar S. Barney, '84, and Thomas Weir, '76, are the Executive Committee.

The Alumni Trustees are: Franklin H. Giddings, '77, Seymour Van Santvoord, '78, Frederick W. Cameron, '81, and Thomas Weir, '76. A successor to Franklin H. Giddings is to be elected this year.

UNION NIGHT AT THE GRADUATES' CLUB OF NEW YORK CITY.

"'Union night' at the Graduates' Club, 111 Fifth Avenue, last night brought out nearly 100 sons of old Union, the famous college at Schenectady. College days were recalled in song and story as the alumni, old and young, stretched their legs under the mahogany and 'rather more than dined.'

"Those who spoke were Rev. Dr. Andrew V. V. Raymond, President of Union College; Supreme Court Justice Peter A. Hendrick, Rev. Dr. William Elliot Griffis, Andrew W. Gleason, Frank C. Avery, George F. Allison, William J. Smith, John A. Bolles, William Allen and Eli Perkins. Clarke W. Crannell was toastmaster.

"Among the guests were Rev. Dr. George Alexander, Henry L. Stoddard, Dr. George W. Clarke, Edgar S. Barney, Rev. Dr. William M. Gilbert, William Grant Brown, Theodore T. Baylor, Henry D. Merchant, J. Y. Lavery, Isaac Harby, W. A. Johnston, Clarence Johnson, J. O. Reynolds, Henry H. Esselstyne, ex-State Engineer Henry A. Van Alstyne and Vincent Kerens.

"Both President Raymond and Justice Hendrick, in their speeches, resented the declaration by Chancellor Day, of Syracuse University, that college life was on a lower plane than heretofore, or that college men were less moral than in other days. Justice Hendrick quoted his experience as a member of the Graduates' Club, made up of representatives of all the colleges of the country. He believed the standard of morals among them was as high as in any other class of men, if not higher.

"Justice Hendrick paid an eloquent tribute to Union College, declaring that in giving William H. Seward to the country it had contributed largely to the salvation of the nation. The justice's remarks elicited prolonged applause."—The New York *Evening Mail,* April 12.

THE UNION COLLEGE ALUMNI ASSOCIATION OF MICHIGAN.

On Saturday evening, April 13, the Union University Alumni Association of Michigan met at the residence of Mr. W. A. Waldron, '79, in Detroit. Among those present were President Raymond, the Rev. H. L. Crane, E. C. Bradbeer, and W. B. Colburn.

THE ALBANY COLLEGE OF PHARMACY.

"The twenty-sixth Commencement exercises of the Albany College of Pharmacy were held at Odd Fellows' Hall on the evening of April 12 and followed by the annual banquet of the Alumni Association of the College at the Ten Eyck. The business meeting of the Alumni Association was held in the afternoon at the Albany Medical College.

"Odd Fellows' Hall, where the exercises were held, was prettily decorated with palms and potted plants. Despite the disagreeable weather a large number of the friends of the graduates were on hand to see the honors and degrees conferred. Of the graduating class, Cicero George Clifford, of Burlington, Vt., took the college prize for the best general examinations, while the Bigelow prize for the best work in microscopy, given by Dr. J. M. Bigelow, was won by John Leonard Harrington, of Oneonta, and the alumni prize for the best work in pharmaceutical laboratory was awarded to Elmer Van Tassel, of Hudson. The junior prizes were distributed as follows: The prize for the best general examinations, to Clyde F. Brandy; the prize for the best work in chemistry to Daniel F. Rasbach; prize for the best work in the pharmaceutical laboratory to Leon A. Lines. The degree of Graduate in Pharmacy was conferred by Dr. Andrew V. V. Raymond, Chancellor of Union University, upon the following: Robert Faulkner Avery, Hunter; Le Roy Chester Baker, Champlain; William Lawrence Baker, Mechanicville; William Henry Canfield, Hoosick Falls; Leo Edward Carey, Greenwich; Cicero George Clifford, Burlington, Vt.; Bernard Francis Donahue, Norwood; William Bartholomew Foody, Rensselaer; Ferdinand Harvard Francois, Schenectady; Percy Sanford Haines, Kingston; John Leonard Harrington, Oneonta; Catherine Elizabeth Hickey, Long Lake; Fred S. Leathers, Hudson; Ida Louise Moore, Albany; Alvah H. Peck, Schenectady; William N. Purple, Albany; Harold Huber Reller, Albany; Milton P. T. Sandford, Waverly; Frederick James Stephens, Waterford; Joseph Edward Sweeney, Ballston; Stuart Carroll Taylor, Luzerne; William Archibald Townsend, Glens Falls; Elmer James Van Tassell, Kingston; Charles P. White, Stroudsburg, Pa.; Stanley G. White, Schenectady.

"Cicero G. Clifford delivered the valedictory address and the address to the graduates was made by James F. McElroy. Prof. Alfred B. Huested presented the prizes. Rev. Dr. Edgar H. Brown was the clergyman officiating. The program was interspersed with music by Holding's orchestra.

"The class officers are: Wm. L. Baker, president; Bernard F. Donahue, first vice-president; Max A. Shoemaker, second vice-president; Ida L. Moore, secretary; Percy S. Haines, treasurer; Cicero G. Clifford, valedictorian; Leo E. Carey, historian; John L. Harrington, marshal; Joseph E. Sweeney, Stuart C. Taylor, William B. Foody, John L. Harrington, Robert F. Avery, executive committee.

"The important move of the afternoon meeting of the Alumni Association was to elect a committee to confer with the board of directors and the faculty of the college on the matter of a new college building. The committee consists of Robert V. Coon, of Troy; William A. Larkin, and Edward C. Hutman. There has been a great deal of talk of late about a new building for the Albany College of Pharmacy. The building is a need, owing to the rapidly increasing membership of the school and the inadequate room and facilities of the Medical College building, where the pharmacy students now recite. It is intended to make the talk amount to something and probably the first move of the committee after its conference with faculty and directors will be to raise a building fund.

"Officers of the Alumni Association were also elected at the afternoon meeting and were as follows: Robert V. Coon, president; William V. Hogan, first vice-president; Cicero G. Clifford, second vice-president; William A. Larkin, secretary; Edwin C. Hutman, treasurer; S. S. Smith, '98, historian; F. G. Dixon, '98, historian.

"The banquet, which took place at the Ten Eyck immediately after the Commencement exercises, was a successful and well attended affair. Theodore J. Bradley, the retiring president of the Association, acted as toastmaster. The speakers were: Dr. A. V. V. Raymond, James F. McElroy, Rev. Dr. Edgar H. Brown, Arthur L. Andrews, Dr. A. B. Huested, William L. Baker, Robert V. Coon, Jr., and Edwin F. Hunting." — *The Concordiensis.*

PERSONALS.

Professor WELLS celebrated his eighty-seventh birthday on April 4.

Professor SIDNEY G. ASHMORE, of the Board of Education, spoke to the pupils at the High School recently. His remarks were in part as follows:

"I have been invited by Mr. Brubacher to say a few words to you about your work in the school —about your studies. You come to school to be educated. We all need to be educated. We need to understand our environment. We need to know something about the things which our eyes see and our ears hear every day of our lives— something about the natural world about us and something about the men and women who inhabit the earth and who are concerned with all the things that are therein. Now we cannot attain this knowledge merely by walking about the streets of a city, nor even by roaming in the country; or, if we could it would take too long. A man who should act on this principle would be ready to die before he had acquired experience enough to entitle him to be called educated. What education does for us is to bring before us in a concentrated form the subjects which an educated man ought to know. It says to us: here are the books and the laboratories and above all the teachers; within a period of a few years you may learn language, literature, mathematics, chemistry, physics, electricity, geology, geography, and all the rest. These things will enable you to understand life and the world about you, so that you shall not go groping in the dark. The instrument or the institution through which these matters are impressed upon you, within a limited time, and with that precision and attention to detail which are necessary to sound knowledge, is called the school; and so I say that the child is fortunate who is permitted to go to school.

"But the question confronts us: Of all the studies brought to our attention in the school, which are the most important? In the High School here you have a choice of subjects. There are five courses open to you, of four years each. It would be impossible for me to discuss the relative value of these courses, or of the various subjects composing them, in the limited time at my disposal this morning. In general, however, the courses seem to me to be wisely laid out, and well adjusted to the needs of this community. There are some points connected with them, that I should like to see modified: for example, I should like to see a wider distribution of Latin and Greek through all the schemes of study, save one, and I should like to see also the study of mathematics withdrawn from that part of the school curriculum where that subject is characterized as 'advanced' mathematics. (Mathematics? Yes; but 'advanced' mathematics? No.) However, one thing in particular it does one good to see, namely, that in all of the five schemes of study the English language and literature are compulsory for all pupils during the full period of four years. I am glad of this because I believe it is right.

"The mother tongue, I say, in days that are past was often sorely neglected in the schools and colleges of this country. Now all this is changed. From being of the least it has become of the first importance in our general scheme of education. It is placed at the top of the column in your schedule of studies, and with the exception of what I may call, for the sake of distinction, the simpler mathematics, it is given the widest possible range, so far as time is concerned. This is right, and I should like to feel that every scholar here is impressed with the fact that the study of English, if diligently pursued at school, is likely to be of

greater service to him always than any other single discipline in his school curriculum.

"Now, of course, when I speak of English I mean not the spoken language alone, but the literature as well. The two must go together, although they may be sometimes separated, in part at least, for purposes of study. I mention this because I have known people who could speak and write English fluently and correctly, and who had, at the same time, a very limited knowledge of the literature. I have known also the reverse to be true: some people possess a wide acquaintance with English authors of the first rank, and are unable to write the language with any fair degree of accuracy. So, as the old saying goes: the one must be done and the other must not be left undone. The literature must not be neglected. By literature I mean the great writers. No doubt you are familiar with the expression 'English classics.' The word 'classics' taken by itself is generally applied to the literatures of ancient Greece and Rome; this is the traditional application of the term, and the meaning still holds good. It is not so very long ago that Greek and Latin authors were the only authors that seemed to have a permanent and abiding value in literature. For this reason they were called 'The Classics.' Since that time other literatures have come to be famous, and in them certain writers have come to be regarded as lasting and as destined always to hold a high place in the estimation of mankind. These authors are called classic. Thus we have French classics, German classics, Italian classics, English classics, as well as Greek and Roman classics. Of such a character are writers like Molière, Goethe, Dante, Shakespeare, Homer, Vergil, Cicero, etc.—these and many more are the great names in literature, and it is these that your school endeavors to make known to you.

"The school brings other subjects to your attention also. You are taught mathematics and the natural sciences—many things that serve to widen your horizon and to give you a knowledge of your environment, many things, too, which have greater commercial value than a simple acquaintance with language and literature can ever have; but the study of classic authors, such as I have referred to, whether they be ancient or modern, will do more to educate the mind and the heart—will do more, I say, to make true men and women of you, than anything else in the curriculum can possibly do, at this time of your lives. In this reference which I am now making to what are known more particularly as the culture-studies I ought to have included history. But other things, such as mathematics and science and economics and finance, valuable and necessary as these are, are less important to the mental and moral growth of the child, than language and literature and history, if I may make bold to say so; and it is this point on which I desire to lay stress this morning. Do your best then to give your attention to the subjects which I have thus briefly and broadly indicated, whenever you have the opportunity to make a choice; and do not be afraid to allow that choice to fall occasionally on the ancient classics, for these lie at the foundation of all education worth having."

Have you read Professor HALE's article on "Edward Everett Hale: a practical Idealist," in the *Outlook* for April 6? If not, do so.

Professor ELLERY addressed the Chemical Society of Colgate University on May 27.

1840.

"Dr. GEORGE W. CLARKE is 90 years old to-day and still spry. According to custom some of his 'old boys' will entertain him at dinner at the Waldorf. They studied under him at the Mount Washington Collegiate Institute, 40 Washington Square, where for thirty-five years, from 1845 to 1880, he taught many of the prominent men of New York.

"But Dr. Clarke was much more than schoolmaster. In his long life he has taken a notable part in politics and has been identified with several of the principal movements for the improvement of the city. He was one of the founders of the Young Men's Christian Association and saved it in the perilous days when it seemed likely to split upon the question of slavery or abolition. He has always taken a great interest in charitable work, and at the present time, in spite of his advanced age, still holds office in a number of flourishing institutions for the relief of the distressed.

"Dr. Clarke was educated at Union College and delights in his title of 'the oldest living graduate.' At the annual alumni dinners of that seat of learning, when he is present, he allows class after class to arise and boast itself the senior and waits patiently until 1843 has had its meed of applause. Then he stands up and calls the assembly to witness that there is one at least of the '40's still hale and vigorous.

"It was an oration he delivered when he was graduated which decided Dr. Clarke's career. It was upon education, and was of such merit that Prof. Solomon Jenner, head of a school in Henry Street, sought him out and invited him to become his assistant. One of the very first pupils Dr. Clarke had was Roscoe Conkling, son of Judge Conkling of Utica, and he guided him with a firm hand.

"It was not three days after young Roscoe had been entered that Dr. Clarke found that he needed more than moral suasion. He disciplined him severely, and made him one of his best friends and most studious pupils. 'He always said,' remarked Dr. Clarke one day, 'that the sound thrashing I gave him made him a United States Senator, and, strange as it may seem, I had the honor of voting for a second term for him in the highest legislative body in the world.'

"Clarke had intended to enter the ministry, but ill-health interfered with his studies, and with Prof. Hubbs he set up the Mount Washington Collegiate Institute in West Washington Place, about a block from the Park. In time he became the sole owner of the school, and under his management it flourished. The sons of many of the leading men of the city were sent to it and he points with pride to the success of such men as Morris K. Jesup, the Rev. Dr. Arthur T. Pierson, and Julien T. Davies. It became almost a family tradition among the Dodges, the Phelpses, and the Havemeyers, to send their sons to him.

"Soon after he had started the school and the University of New York had conferred upon him the degree of Doctor in Philosophy, Dr. Clarke became a Director in the Ophthalmic Hospital. It had at that time a capacity of 1,000 patients a year, but with the assistance of John W. Whitefield, Andrew Carnegie's father-in-law, Dr. Clarke increased its accommodation fourfold. He can now boast as President of the institution that since his connection with it it has brought relief to 600,000 sufferers from diseases of the eye, ear, and throat.

"The Young Men's Christian Association was just getting well under way when the Civil War crisis began. Dr. Clarke had been one of the prime movers in it, and he saw with concern that in the heat of the anti-slavery agitation the interests of the institution were subordinated to the politics of the hour. He proposed a resolution that no discussion of the matter should be undertaken by the Y. M. C. A. For six nights this motion was debated in the auditorium of the University of New York, but it was carried in the end by three votes, and the association was saved from an untimely end.

"In 1872 Dr. Young was a delegate to the Republican State Convention at Utica and was elected Vice-President. Half a dozen candidates had been put forward for

Governor, and then Dr. Clarke named Gen. John A. Dix in an eloquent speech. As he closed the convention stampeded from the other nominees to his candidate, and it was always held that the election of Gen. Dix obtained the choice of Gen. Grant as President. Horace Greeley ran against him, but the selection of Dix in New York was recognized as turning the scale against the distinguished editor.

"Yet Dr. Clarke did not know Dix, and nominated him from an entirely disinterested belief that he was the best man for the place. When he was Assemblyman at Albany the politicians flocked to obtain his influence with the Governor, and they were amazed to find that he had never seen his candidate.

"As a member of the Assembly Dr. Clarke procured the passage of the bill establishing the Home for Friendless Girls in Washington Square, of which he is still a Vice-President.

"Dr. Clarke is Vice-President of the Hahnemann Hospital, and Secretary of the Board of Trustees of the Flower Medical College and Hospital. He has for sixty-seven years been a member of the Phi Beta Kappa fraternity and only Joseph H. Choate and one other member are senior to him in the New England Society.

"He married Mary J. McKie on July 29, 1847. Of his ten children, seven are living, among them the well known art collector, Thomas B. Clarke."—N. Y. *Times,* April 1.

"Dr. George W. Clarke sat and smoked his cigar and cracked his jokes with the best of them when thirty-five of his 'old boys' of the Mount Washington Collegiate Institute gathered at the Waldorf last night to do honor to his ninetieth birthday. Youngsters 50 and 60 years old told how the good doctor used to wield the birch around the old institute at 40 Washington Square and how strong he was with that birch in his hands. During the telling the guest of the evening would chuckle and spur on the merriment.

"The dinner in the quiet side room away from the music and the glitter of the central ballroom was simply a gathering of the boys. Men whose offices are in Wall Street and whose names are known in the courts took the floor to tell of pranks behind the doctor's back and to recite incidents that were fresh with the vintage of forty years. The doctor himself, when he was called upon to talk to his boys again, made a very interesting speech. They all said that he was the youngest in the lot.

"Morris K. Jesup and H. O. Havemeyer sent telegrams regretting that they could not be among those who celebrated Dr. Clarke's birthday and the sixtieth anniversary of the founding of the school. Among those who were about the table and who joined in the fun were William Madison Clarke, a son of Dr. Clarke and President of the Alumni Association of the school; Thomas B. and Paul Irving Clarke, his brothers; Edward Van Zandt, Henry Gregory, Dr. Alpheus Freeman, Benjamin A. Hegeman, Jr., Ira H. Brainerd, Isaac S. Barrett, John Canfield Tomlinson, Dr. Gordon K. Dickinson, William H. Dickinson, Augustus H. Hall and Dr. Edward E. Minner.

"When William Madison Clarke rose to greet his father on behalf of the old boys he said that it was appropriate that he read an ode. It was such a bad ode, he said, that it was really funny, though its intent was perfectly serious.

'You've got me cornered, dad, this time;
With ninety can't be made a rhyme.'

Mr. Clarke started bravely, but roars of laughter greeted his modest effort. He continued to the end. Even the old doctor said that the poem was bad. He whispered that fact to his neighbor so loudly that his voice carried the length of the table, and when his son heard Clarke senior he merrily wagged

his cigar at him and shook his head.

"The Rev. Dr. Wilson Phraener, who admitted that he was only five years behind Dr. Clarke in the race with time, got up to tell how he came to be first professor of Latin and Greek at the Mount Washington Collegiate Institute. When he came to the school there were boys there whose names afterward became widely known. William E. Dodge and Jewett Dodge were there, William Walter Phelps, Walter Palmer and George Baker.

" 'I can scarcely realize that the time has passed so rapidly that many of my old pupils and those of Dr. Clarke have already passed to the beyond,' said Dr. Phraener. 'But you old boys who are now getting to be old men, though far behind myself and the dear doctor here, don't forget that the cream of life comes with old age. When one grows old he has the pleasure of looking back and seeing the fruits of his efforts and he can look only a little way forward to the dawn of the life that is to be.'

"Isaac Sisson Barnett, who was one of the first pupils to go to Dr. Clarke's school after it had opened in Washington Square, told with mock horror what a terrible disciplinarian the master used to be: 'I remember how one time I was called up before that big desk and the doctor reached for that long black rattan that we all knew so well. I held out my hand and he had the rattan trembling in the air when the door suddenly opened and Mrs. Clarke ran in. That saved me, because when the doctor saw his wife and noted the look on her face he let me go. Mrs. Clarke always did save the boys just in the nick of time.'

"The son, who was acting as toastmaster at one end of the table, stood up and smiled at his father, down the length of the board, 'Father, are you ready with your little speech?' he said. The old gentleman got to his feet spryly and looked about the table with his eyes puckered into a smile: 'Really gentlemen—boys, I mean—my heart is too full for utterance. Not because I have had too much Apollinaris water, but just because I am so glad that you should have cared to come here and help me celebrate my ninetieth birthday. A good doctor and a favoring Providence have combined to allow me to come here and listen to your speeches, which, after all, I am entirely responsible for, since I was your teacher and taught you how to talk. The world is moving rapidly and we are now in the first decade of the new century. I hope that the new century will explode some of the superstitions of the old—don't start on a voyage on Friday; don't sit down with thirteen at the table. But worst of all the old superstitions is the one to believe that the good die young. [Laughter.] Here I am 90 years old, and I am not very bad. I was speaking to my old friend Noah the other day—oh, no, not the Noah you're thinking of; another man of the same name. He said 'Clarke, there's an exception to every rule and you're the exception to this game about the good dying young.' I told him I enjoyed being an exception.'

"Dr. Clarke spoke about the way the world rolls on into another age than that he once knew.

" 'A great wave of right thinking is sweeping over this country,' he said. 'And I believe that the whole world is getting better. I believe that the multiplication of millionaires in our land, which so many people seem to dread, is not going to work any harm at all. Most of our millionaires are good millionaires—some of that kind are sitting around the table right now. When I was teaching school some of my boys—you boys—were the sons of millionaires and some of them were lazy because they thought there was no need of their working. I remember one time I gave those lazy boys a little lecture that was not in the curriculum. I told them that they were all born to take a place in the social fabric

and that there was no place there for men who would not do their share of work. A few days after that I got a letter from Robert Bonner thanking me for the little lecture. His boys had felt it and had gone home and told their father what I had said.'

"When Dr. Clarke had finished speaking he took his seat, smiling. All the old boys stood up and drank to his winning the century mark, and as they toasted him thus he smiled again and slowly shook his head."—N. Y. *Sun,* April 2.

1841.

"Samuel Dickson Luce, of Fayetteville, the last of the ex-surrogates of Onondaga county, died in St. Joseph's Hospital, Syracuse, Saturday morning at the age of 85 years. Mr. Luce was graduated from Union College in 1841, at the age of 19, the youngest in a class of eighty. He was all his life a student, to which fact he owed the partial loss of his sight. Until about three years ago he attended nearly every commencement of his college here. His funeral took place from the Presbyterian church, Fayetteville, yesterday afternoon."—The *Schenectady Gazette,* May 7.

1844.

"Friends of Judge John W. McKim expect him to celebrate the 30th anniversary of his appointment as judge of probate and insolvency for Suffolk County to-day by arriving at the court house shortly after nine o'clock, going directly to his chambers and beginning promptly at ten o'clock to transact the daily routine of business. Methodical and punctual, conscientious in the performance of an important public office, it is not thought he will vary his well established course because he has filled the same office for so many years. Probably no judge sitting in the commonwealth is held in such affectionate regard by persons with whom he has official relations as Judge McKim. As judge of probate, he has before him each year thousands of people who have little knowledge of the affairs that have been left in their charge. His kindly, wholesome advice is held in the grateful memory of many a widow whose affairs have been passed upon by his court. In the 30 years Judge McKim has sat on the bench of the probate court, 90,000 cases have been acted upon. Of this number probably two-thirds have received his personal attention. Up to July 20, 1893, when Judge Robert Grant was appointed to divide with him the work of the Suffolk County probate court, Judge McKim was the sole probate judge of the county. Although he generally decides a case before leaving the bench, comparatively few of his decisions are overruled, and appeals are seldom taken. He listens to cases with the greatest patience, and by his tactful suggestions helps witnesses to bring out the facts in the cases. Born in Boston, Nov. 25, 1822, he is in his 85th year, but doesn't allow his age to be a burden to him. He is a graduate of Union College, studied law in Washington and was admitted to the bar in Boston, April 8, 1867. For a time he lived Ohio and was district attorney in Defiance county. He was a captain, brevetted major, in the Civil War. In 1874 Gov. Talbot appointed him judge of the municipal court at West Roxbury, which position he held until he became judge of probate."—*Boston Herald,* March 28.

1846.

John Livingston Swits died suddenly at his home, 25 North Ferry Street, a few minutes before 7 o'clock Saturday morning, April 13. Although Mr. Swits had been ill for some time his death was unexpected. Death was due to heart failure. At the time he was stricken he was up and dressed. Mr. Swits was born at the Viele homestead at Hoosick, July 26, 1825. His father was Rev. Abraham J. Swits, a former pastor of the Second Reformed church. His ances-

tors were among the first settlers of the Mohawk valley. Mr. Swits received his education in the Schenectady Lyceum and Academy, entering the sophomore class of Union College in 1843. He was graduated in 1846 and began the study of law in the office of Paige & Potter. He was admitted to the bar in 1848. Mr. Swits, owing to ill health, never practiced, but went west, settling in Davenport, Ia., where he engaged in mercantile pursuits. During the Civil War he was state sanitary agent of Iowa at Corinth, Mississippi, and later a member of the canal commission. After an absence of twenty-four years Mr. Swits returned to Schenectady in 1874, settling at 25 Ferry Street, where he has since lived. He organized and promoted several local enterprises, among which was the Schenectady Free Hospital and Dispensary. For twelve years he was a member of the Board of Health. He was a member of the Phi Beta Kappa Society, Sons of American Revolution, the Holland Society of New York and the First Reformed Church. In 1874 Mr. Swits was married to Miss Mary W. Knapp of Jersey City. Mrs. Swits died six months later. In 1878 he was married to Miss Sarah M. Knapp, a sister of his first wife, who lived but two years. With the exception of his niece, Miss Mary M. Swits, who lived with him, Mr. Swits is survived by no near relatives. The funeral services were held at his late home Tuesday afternoon, April 16, at three o'clock. The Rev. Herbert C. Hinds, pastor of the State Street Presbyterian Church, conducted the services.

1847.

CHARLES BABCOCK of Ithaca, N. Y., expects to be present at Commencement this year and to speak for his class on Alumni Day.

GABRIEL BOUCK of Oshkosh, Wisconsin, left an estate valued at $600,000.

1857.

The Rev. CHESTER C. THORNE of Windham, N. Y., severed his connection with the Presbyterian church of that place on May 1.

1858.

Sarah Elizabeth (Hagaman) Graham, the wife of the Hon. JOSEPH B. GRAHAM, former Mayor of Schenectady, died at her home, 610 Chapel Street, Schenectady, on Sunday, April 21, after a lingering illness.

1860.

"At the first quarterly meeting of the Rensselaer Bar Association, held in Troy, May 6, the Hon. CHARLES E. PATTERSON, Union, '06, read a most interesting address on 'Trial by Jury of International Disputes.' Mr. Patterson was formerly Speaker of the New York State Assembly, and is a distinguished veteran member of the Rensselaer Bar. His paper was a plea for peace, and followed very fittingly the discussion at the recent conference in New York City."—The *Concordiensis.*

1863.

"Every Man who has worked for *The Sun* in the last thirty years mourns a personal friend in FRANK PATTON. Those who came close to him knew what curious and great learning his modesty concealed; his gentleness and helpful kindness gave courage to all beginners and were rarely forgotten. A great heart and a gentle soul, for which men loved him."—N. Y. *Sun,* March 30.

1864.

"The Rev. CHAUNCEY E. VAN ALLEN, aged 68, died suddenly of heart failure on Monday evening at his home, 302 Union Street, Springfield, Mass. Yesterday's Springfield *Republican* contains the following obituary notice:

'Mr. Van Allen, who was a retired Baptist clergyman, had been about town all day as usual, and did not complain of ill-health until evening. Then he said nothing that would indicate that his condition was at all serious, but his housekeeper, nevertheless, thought

that it would be wise to call his son, Dr. Harvey W. Van Allen, of Maple Street. This she did quietly, and when he arrived he saw nothing in his father's condition to arouse the slightest alarm. He gave him some mild medicine, however, and started him for bed. When he was partly undressed he suddenly fell forward and died instantly. Dr. Van Allen attributes his father's death to heart failure, which he says may have been aggravated by the death of his wife, which occurred only five weeks ago, and also by the death of his only grandson, the doctor's seven-year-old boy, who died a few weeks before his grandmother. Mr. Van Allen had been deeply grieved by the death of his grandson, and when it was followed within a month by that of his wife, it was probably more than he could bear. He had been looking forward to attending the memorial service for his wife which the Woman's Christian Temperance Union had planned to hold in Wesley Church this afternoon. Mr. Van Allen was born in West Perth, a suburb of Gloversville, N. Y., in 1839. His father was a farmer of Dutch extraction. Mr. Van Allen spent his boyhood and youth in his native town, and was graduated from Union College and later from Union Theological Seminary. He was ordained a Presbyterian minister about 1867, and his first charge was in Dallas, Pa. In 1874 he left the Presbyterian church and was ordained a Baptist preacher. He had various charges in New York State, and became well known in the central and northern portions of that State, where most of his charges were. His last charge was in Russell, from which place he resigned about seven years ago. He then went to Springfield. During the years of his residence there Mr. Van Allen had supplied in many of the local Baptist pulpits, and had consequently a large circle of friends and acquaintances. He supplied in the Central Baptist church of Chicopee for nearly a year. He married Miss Phoebe Annie Ward, of Schenectady, N. Y., in 1865.'

"Mr. Van Allen is survived by one son, Dr. Harvey W. Van Allen, of 2 Maple Street, two brothers, Rev. C. E. Van Allen, of Coolbaugh, Pa., and Dr. C. L. Van Allen, of Schenectady, N. Y."—The Schenectady *Evening Star,* April 24.

1867.

"The Rev. Dr. TEUNIS SLINGERLAND HAMLIN, who was pastor of the Presbyterian Church of the Covenant, in Washington, D. C., died just before midnight in the Hahnemann Hospital. Besides being one of the most influential preachers in Washington, Dr. Hamlin was well known to New Yorkers, as he had preached frequently in the Brick and the Fifth Avenue Presbyterian churches. He was nearly sixty years old, having been born in Glenville, N. Y., on May 31, 1847, and was the son of Solomon Curtis Hamlin and Christina Slingerland. After he was graduated from Union College in 1867, from which institution he received the degree of D.D., 1886, he held a pastorate for thirteen years in Troy. Then for two years he was in Cincinnati. He went to Washington in 1886. In 1873 he was married to Miss Frances E. Bacon, at Ypsilanti, Mich. Among the institutions and societies to which Dr. Hamlin belonged, were the Memorial Association of the District of Columbia, of which he was vice-president; the Board of Trustees of Howard University, D. C., president; the United Society of Christian Endeavor, trustee; the Government Hospital for the Insane, visitor; American Historical Association, Archæological Society of America, American Tract Society, University Club of this city, and Chevy Chase and University Clubs of Washington. He was the author of 'Denominationalism vs. Christian Union.' His home was at No. 1316 Connecticut Avenue, N. E., Washington. The pastor of the Church of the Covenant was regarded as one of the

most noted divines in the East, and his congregation numbered many persons of prominence. Benjamin Harrison, when President, was a regular attendant. At various times Dr. Hamlin preached at Yale, Cornell, Princeton, Amherst, and Vassar, and he was a prolific writer for newspapers, magazines, and reviews. He was chairman of the committee of his Presbytery on the revision of the 'Confession of Faith' of the Presbyterian church. Dr. Hamlin came over from Washington to attend the Peace Congress as a delegate, in company with John W. Foster, ex-secretary of state. He was present at yesterday morning's session. Afterward he went to his son's law office. Shortly before two o'clock he suggested luncheon, and in company with his son started to leave the office. He complained of illness in the hall, and was carried back into the office. Several physicians were called in, and they succeeded for a time in relieving the clergyman, who had not lost consciousness. At five o'clock he was placed in an ambulance to be taken to Hahnemann Hospital. By the time the hospital was reached, he had become unconscious. Later he rallied, but the improvement did not last long."—The New York *Evening Post*, April 18.

"Final tribute of respect and affection was paid to the remains of Rev. Teunis S. Hamlin, pastor of the Church of the Covenant, in the funeral services held yesterday afternoon in that church. It was impossible for all who desired to attend to enter the church, as the seating accommodations were almost fully taken by the members of the congregation, the clergymen of the city and delegations from various organizations with which the deceased was connected. The throng of people who came for the purpose of attending the funeral filled the broad plaza in front of the church edifice, but it was not mere curiosity that had drawn them there, but rather respect and admiration for the life and character of the man who had been for so many years a useful factor in the life of the community. Not only were the ministers of the Presbyterian denomination, of which Dr. Hamlin was a member, present in large numbers, but also many representatives from other denominations in the city, thus furnishing another evidence of the broad and catholic life of the deceased. Among the organizations represented were the Board of Trustees of Howard University, Board of Visitors of the Government Hospital for the Insane, the Memorial Association of the District, the Citizens' Relief Committee and the Play Grounds Association. The remains were conveyed from the residence, 1316 Connecticut Avenue, preceded by the honorary pallbearers, the casket being carried by eight young men of the church. The family, Mrs. Hamlin and her two sons, Mrs. Hamlin's sister, Mrs. Gordon, and Dr. Gordon and other relatives followed. A magnificent pall, made entirely of violets, a token from the officers of the church, covered the casket, which was placed in front of the pulpit platform in the midst of the many floral tributes which were massed about it on all sides, making the floral setting one of great beauty. The funeral services were befitting the character of the man—simple, but genuine in the expression of real sympathy and of the worth of the life of him who had passed away. Prof. A. P. McGiffert of the Union Theological Seminary, New York City, who came here especially to attend the funeral as the representative of the seminary, of which Dr. Hamlin was a graduate, offered the opening prayer. A selection was rendered by the quartette choir of the church, and then Rev. Jos. T. Kelley, pastor of the Fourth Presbyterian church, read a selection from the Scriptures, followed by prayer by Rev. Dr. Bittinger. The address was delivered by Rev. Dr. Wilton Merle Smith, pastor of the Central Presbyterian church of

New York City, a long-time friend of the deceased, who not only was brought into official relations with Dr. Hamlin, but who knew and loved him personally. It was a beautiful tribute, as well as one that was genuinely in earnest, and came from the heart, such words as a friend would speak of another whom he had known and honored, as well as loved. Dr. Smith's address was followed by one from Rev. Charles Alvin Smith, the minister at Peck Chapel, a mission under the care of the church. Mr. Smith was also able, from his intimate acquaintance with Dr. Hamlin and from the personal esteem and affection which grew out of such relationship, to speak with appreciation of the sterling qualities and the manly character of the man who had passed away. Both speakers emphasized those qualities in Dr. Hamlin which had endeared him to such a large number of people and which contributed so generally to the success of the work which he accomplished in this city. These were in brief: His sympathy and love for mankind, his tact and his business ability, as well as the strength and beauty which comes from a Christian life. The services were brought to a conclusion by the benediction. While the remains were being carried from the church the funeral march from 'Saul' was played by Mr. Murray, the organist. The interment was in Rock Creek Cemetery. The honorary pallbearers were the members of the session of the church and representatives of the trustees and the deacons, as follows: From the Session, Alfred R. Quaiffe, Claudius B. Jewell, Frederic L. Moore, Archibald Greenlees, Stanton J. Peelle, E. Southard Parker, C. E. Foster, Edward M. Gallaudet, John W. Foster, Henry B. F. Macfarland, Henry A. Pressey and W. B. Bryan; from the Board of Trustees, William S. Carroll and William E. Curtis; from the Deacons, Russell B. Taylor and Henry M. Le Duc. The active pallbearers were from the Men's Society of the church, and were as follows: Frederick A. Fenning, Andrew Y. Bradley, Allan O. Clephane, Walter M. Gilbert, Brainard W. Parker, Stanton Penfield Peelle, Walter M. Gilbert and William H. Baldwin. Among the floral tributes were a bouquet of sage palm leaves and white roses, sent by Mrs. John Hay, wife of the late Secretary of State; pieces from the D. A. R., of which organization Mrs. Hamlin is chaplain general; a standing wreath of violets and lilies of the valley, from the ladies of the church; a standing wreath of orchids and lilies of the valley, from Mr. and Mrs. George Westinghouse and George Westinghouse, Jr.; a cluster of sage palms, from the Men's Society of the church; a sheaf of Easter lilies, from Senator and Mrs. Hale; a casket cluster of white roses and violets, from the pupils of Mt. Vernon Seminary; a bouquet of lilies and violets on palms, from Mrs. Gardiner G. Hubbard; palm leaves and lilies, from Mrs. Cornelia McLanahan Curtis; a cluster of American beauty roses, from Mrs. Hamlin's class; a wreath of roses from Mr. and Mrs. Alexander Graham Bell, and a large casket spray of white roses and ferns, from the executive committee of the Peace Congress, of which Dr. Hamlin was a member. Resolutions were adopted by the Temple Baptist church expressive of sorrow for the loss sustained by the death of Dr. Hamlin and sympathy for his family and the congregation which he served. In the course of the resolutions, which were offered by a committee of which Rev. J. J. Muir, the pastor of the church, was the chairman, it was stated 'that his truly catholic spirit, the breadth of his sympathies, the extensiveness of his influence, and his willingness to respond to calls outside of his own parish bounds, to which we can gratefully testify, made him prominent as a force for righteousness in Washington, and will make his place exceedingly hard to fill.' A

tribute was paid to the life and character of Dr. Hamlin at the meeting for men yesterday afternoon in the Y. M. C. A. gymnasium."—The Washington *Evening Star*, April 22.

"The late Dr. TEUNIS S. HAMLIN, who was pastor of the Church of the Covenant, was eulogized by prominent citizens of the District Sunday afternoon at the church over which he had presided for many years. Words in tribute to the deceased minister's character were spoken by clergyman and layman, who told of the broad-mindedness of Dr. Hamlin; his love for humanity; his hope for the universal moral betterment of mankind and his earnest wish for the ultimate union of all Christian denominations. The Church of the Covenant was densely crowded by friends of Dr. Hamlin, who loved him in life and deeply mourn his death. Among those who were in the large audience were James Bryce, the British ambassador, and Dr. C. W. Needham, president of George Washington University. Mrs. Hamlin and her sons were present. During the progress of the service, several of the favorite hymns of the late pastor were given by the choir. When Gen. John W. Foster, chairman of the committee having the arrangements in hand, and who presided, announced that 'For All The Saints,' one of Dr. Hamlin's favorite hymns, would be sung, the choir began the air and the congregation arose and joined in with one voice. The services were opened by an invocation by Rev. Samuel H. Greene, pastor of the Calvary Baptist church. 'Dr. Hamlin was true to his religious duties and his church,' said Mr. Justice Brewer of the United States Supreme Court in beginning his address, 'but he never forgot the other work on the outside that was to be accomplished. This city, this nation, called on him and he came willingly to their assistance in any way he could.' With reference to education and his active interest in the welfare of the people at large, Justice Brewer said that Dr. Hamlin had given no little time and thought to the great cause. 'Education, on which the pillar of society must rest, was of particular interest to Dr. Hamlin, and he accomplished a great deal along these lines,' Justice Brewer said. 'Dr. Hamlin realized the great national danger in race prejudice, and he did everything in his power to remove such a tendency. He realized that the colored people are to become a mighty factor in the affairs of this nation. His work in education was as a good citizen, and at all public gatherings he was always welcome. Of his work and his worth we are all justly proud. As a citizen he displayed unusual interest in the city and the nation, and the city and the nation alike have felt his loss. We, of all churches, feel a deep regret at his having been taken away.' Right Rev. Henry Y. Satterlee, Episcopal bishop of Washington, at the beginning of his address, said that 'to know Dr. Hamlin was to love him. Christianity, first of all, is a personal religion,' he continued. 'Dr. Hamlin was a type of superhuman character. God gave him spirit of power. In his great accomplishments and his wonderful work we all felt that he had a warm heart and was particularly possessed with soberness of judgment. At little meetings of the ministry held every three months, when we discussed points of difference and of union, Dr. Hamlin was always in favor of the points of union in preference to the other questions. Dr. Hamlin has gone, but he has left a mark in this world—a mark more lasting than could be put upon stone. Friendships that began here will last through eternity.' Henry B. F. Macfarland, president of the Board of District Commissioners, spoke about Dr. Hamlin and his religious work not alone in the church or in the Sunday school, but everywhere. 'His service in this church was all religious, but he excelled as a preacher and a pastor,' said the commissioner.

'He was greatest as a pastor, as every minister should be, even in the Presbyterian church, where the sermon is so important. His preaching marked by strength and sincerity, came from the most faithful preparation, was effective in its results, and made him known not only at home but abroad. In the principal pulpits of this country and England, as in the Church of the Covenant, he spoke with the same success. But, while he had worldwide interests, it was as the pastor of his own people that he was most devoted and most successful. He literally gave his life for the sheep. He will be longest remembered for his sympathy and appreciation, in joy and in sorrow, and especially for his tender and tactful ministries to those in affliction.' Mr. Charles F. Nesbit spoke on behalf of the board of deacons, and told of Dr. Hamlin's services to the poor and unfortunate. Mr. Charles D. Walcott, secretary of the Smithsonian Institution, spoke on Dr. Hamlin's relation to the temporalities of the church on behalf of the trustees. 'Dr. Hamlin was so strong in his religious belief,' he said, 'that you fully realized, appreciated his common sense. He invariably exhibited sound judgment in all things.' Dr. Hamlin's relation to the presbytery and the denominations, as a memorial of the presbytery, was told in a tribute read by Rev. C. A. Smith. At the conclusion of the addresses, the prayer and benediction were offered by Rev. Robert M. Moore, pastor of the Foundry Methodist church."—The Schenectady *Daily Union*, May 1.

Frederic B. Howard resides in Grosse Isle, Michigan.

"The death of Milton Goodgrey Planck, M. D., occurred yesterday forenoon at his residence, 23 Barrett Street, after a second stroke of paralysis. Dr. Planck suffered the first stroke on June 17, 1905. He recovered sufficiently to be around the house but could not attend to his practice. He was taken with a cerebral hemorrhage yesterday and became unconscious. He never rallied. Dr. Planck was born February 4, 1842, at Sharon Springs, N. Y., where he attended the public schools. His father was Adam Planck and his mother Irena Dunckel. His father belonged to a very noted family of Würtemburg, Germany, whose descendants settled early in this country. From the public schools of Sharon Springs, Dr. Planck entered Cazenovia Seminary and remained in that institution for three years preparing for Union College. He entered Union and was graduated with the class of '67 after which he entered the College of Physicians and Surgeons in New York City, graduating from there with the class of 1870. He was a member of the Phi Beta Kappa Society and also held the degrees of A.B. and A.M. On June 15, 1871, he was married to Elizabeth Ann Livingston of Johnstown and in the same year he settled in this city. He gained distinction at once in his profession, having been a pupil of the late Dr. Albert M. Vedder, a discipleship of which he was justly proud. Dr. Planck's ability as a physician ranked high and he was an authority on skin diseases. He was elected coroner and also held the office of county physician. He was prominent in both the State and County Medical societies. The ground of the First M. E. Church was onced owned by his parents. He was one of the old Liberty Street members of that church and the last time he was out of his home was on May 3, when he attended its centennial services. He has one sister, Mrs. Emma Elaget, of Sharon Springs, and two brothers, James Planck of South Valley, and Harrison Planck of Gloversville. Dr. Planck is survived by his wife and three daughters, Mrs. H. E. Hissong of New York, and Eleanor and Ida of this city. The funeral will be held at his residence on Wednesday afternoon at 3:30 o'clock. The Schenectady County Medical Society will attend in a

body."—*Schenectady Gazette,* May 13.

1868.

"WESTINGHOUSE, the Man Who Works," is the title of an article by Clifford Smyth in *Munsey's* for April. Under the general title of "Romances of Success," Paul Latzke writes of "GEORGE WESTINGHOUSE" in *Everybody's* for May.

1874.

The Rev. P. H. MCDERMOTT, of Watervliet, returned recently from a cruise to the West Indies, Panama and Venezuela.

1875.

President RAYMOND was one of the delegates appointed by Mayor Clute to represent the city of Schenectady at the National Arbitration and Peace Congress which convened in Carnegie Hall, New York, on April 14.

1878.

The Hon. EVERETT SMITH is the crack shot of Schenectady,—so proved in open tournament—and Commissioner of Public Safety. Unsafe Schenectadians take notice.

1882.

The Rev. ELIJAH W. GREENE was ordained to the priesthood of the Protestant Episcopal Church, Tuesday, April 9, at Vermillion, South Dakota.

1883.

Carrie (Blunt) Bennett, the wife of FRED F. BENNETT, died in Chicago, April 25.

1885.

FRANK BAILEY was one of the speakers at the ninth annual dinner of the Brooklyn League, held at the Union League Club in Brooklyn on April 1.

1887.

The officers of the CLASS of 1887 are: Charles B. McMurray, President; Charles F. Bridge, Secretary; Charles B. McMurray, John C. Van Voast and Edward M. Cameron, Reunion Committee.

ALBERT H. PEPPER, when last heard from, was in Tiahuanacu, Bolivia, among the ruins and the mummies. Pepper, however, to judge from the width, elusiveness and protraction of his Odyssean wanderings, is neither a ruin nor a mummy, but very much alive and a high-stepping, seven-league-booted, wind-swift globe-trotter. Come back anyway, Pep. All is forgiven. *South American papers please copy.*

P. S. He has come back.

1890.

E. BROWN BAKER is president of the Pittsburg-Eastern Company, General Contractors. His address is Cannon Place, Troy, N. Y.

1897.

The officers of the CLASS of 1897 are: Harry A. Frey, President; James C. Cooper, Secretary; Hiram C. Todd, James Wingate and James C. Cooper, Reunion Committee. Hiram C. Todd will respond for the class at the Alumni Dinner.

1898.

"The office of Deputy Auditor of the State of Pennsylvania will soon be filled by a Union College graduate—THOMAS A. CRICHTON, of Wellsboro, Pennsylvania. The office is an important one and Auditor-General-Elect Young paid a tribute to Mr. Crichton's ability in appointing him to be his chief assistant. After winning foot ball fame in college, and graduating with distinction in 1898. Mr. Crichton was employed at Mercersburg Academy for two years as instructor in English, Oratory and Mathematics. He studied law with Mayor George W. Merrick and Robert K. Young at Wellsboro and was admitted to the Tioga County Bar, after passing one of the most brilliant examinations of its history. He practiced law for a short time and then assumed a civil service position in the Pension Office at Washington, where he remained for three years. While there he took a

course in the National University Law School, in which he carried off every honor for which he competed but one. In December, 1903, he was married to Miss Frances Potter of Washington, D. C. In announcing the appointment of Mr. Crichton, Mr. Young said: 'The office of Deputy Auditor-General is a very important one, not only to the people of the State, but to the Auditor-General himself. It is a purely personal appointment and peculiarly so in this instance, politics having no part in it. The selection of Mr. Crichton was made for two reasons: First, I wanted a man whom I know from the ground up. In my absence the deputy is authorized to sign warrants and do other important acts which bind his principal. So important does the State consider the deputy that he is bonded in twice the sum of the Auditor-General for the faithful performance of his duties. Secondly, I wanted the best lawyer to be had for the salary attached to the office, who had the other requisite, and in Mr. Crichton I am satisfied that I have secured both'." —The *Concordiensis.*

PERLEY POORE SHEEHAN'S address is *New York Herald,* 49 Avenue de l'Opéra, Paris, France.

On Wednesday evening, April 10, ROBERT CHAUNCEY YATES, of Chicago, son of CHAUNCEY O. YATES, '71, of Schenectady, was united in marriage to Mabel Louise Schuyler, daughter of Captain Herman Philip Schuyler, assistant treasurer of the General Electric Company, at the home of the bride's father, 232 Lark Street, Albany. ALLEN S. PECK, 1903, was groomsman.

1900.

A daughter was recently born to Mr. and Mrs. MELVIN T. BENDER.

"A sociable was given last evening at the chapel of the North Reformed church, by the Christian Endeavor Society to the members of the church, and a goodly number availed themselves of the opportunity to enjoy a pleasant evening. The chapel was very prettily decorated with the national colors. Games and music were enjoyed and refreshments served. The feature of the evening was the presentation of a beautiful desk lamp by the society to the Rev. WILLARD DAYTON BROWN. The day of the social happened to fall upon the pastor's birthday. In some way it was discovered through some chance remark, and the young people took advantage of the occasion to offer congratulations in the shape of this gift. There was also a birthday cake, which was awarded as a prize. Aided by the pastor's wife, the society induced him to join in a promenade for the prize, and then at the end, the judges, Frank Hughes, J. H. Ackerman, and D. C. Cowdry, after careful deliberation due to the difficulties met in making a decision, awarded the birthday cake, with its appropriate number of candles, to the pastor. Mr. Brown voiced his thanks for both gifts in an appropriate way." —Passaic *Daily News,* Feb. 15.

PHILIP L. THOMSON has been transferred from the Chicago to the Pittsburg office of the Western Electric Company.

1901.

RICHARD F. WARNER, after three years of travel in South Africa and Japan, in the interests of the General Electric Company, has returned to the main office of the company in this city.

1902.

The officers of the CLASS of 1902 are: The Rev. Fraser Metzger, President; Addison H. Hinman, Secretary, and Dr. Walter E. Hays, Treasurer. The Rev. Harry L. Crain, of Detroit, will respond for the class at the Alumni Dinner.

1906.

The engagement is announced of PAUL ALONZO MEAD of New York, to Miss E. Pauline Hoag of Poughkeepsie.

1907.

"A canvass of the Senior Class of Union College as to the future oc-

cupations of its members has resulted as follows: Avery, Bishop, Cantwell, Davis, Dillon, Langley, Moore, Nicht, Osborne, Reed and Stearns will enter the General Electric works. Rodriguez and Pyles will go into electrical engineering work in Brazil, after spending a short time here at the General Electric works. Bennett will enter the College of Physicians and Surgeons in New York in the fall. Brennan will enter the local municipal service as an engineer on the city engineer's staff. DeMay will take two more years at Union, and will get an engineering degree. Girvin will make a specialty of chemistry, and will assume a position as analytical chemist. Harvey will take up engineering work near Geneva, N. Y. Hill will enter the Albany Law School in the fall. Noble will go into business with the Vrooman Hardware Company. Parsons, who is going to enter the hotel business, will be assistant manager of the Hotel Wawbeek at Upper Saranac. Waters will join the state engineering corps. White will enter the Harvard Law School in the fall. Gardiner is going into the lumber business. Butcher, Fairbairn, Franchot, MacIntosh, Newton, Trumbull and Wadsworth are undecided as yet." — *Schenectady Gazette,* May 6.

E. I. Rogers of Providence, R. I., will be married to Miss Ethel Hazard of that city in July.

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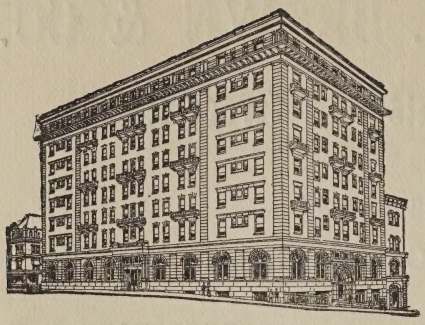

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